HISTORY INFORMATION FOR THE FOLLOWING MANUAL:

SERVICE MANUAL DA-4X CHASSIS

MODEL NAME	REMOTE COMMANDER	DESTINATION	CHASSIS NO.
KP-57WV600	RM-Y188	US/CND	SCC-P92D-A
KP-57WV700	RM-Y188	US/CND	SCC-P92B-A
KP-65WV600	RM-Y188	US/CND	SCC-P92C-A
KP-65WV700	RM-Y188	US/CND	SCC-P92A-A

ORIGINAL MANUAL ISSUE DATE: 6/2002

ALL REVISIONS AND UPDATES TO THE ORIGINAL MANUAL ARE APPENDED TO THE END OF THE PDF FILE.

REVISION DATE	REVISION TYPE	SUBJECT
6/2002	No revisions or updates are applicable at this time.	
7/2002	Re-release Manual	Revised Service Data List (pgs. 21, 22, 25, 43, 44, 45) Revised Circuit Boards Location (pg. 60) to include U Board and UD Board Removed Shade(B) (pg. 110)
8/2002	Correction-1	Revised Exploded View Cover diagrams to reflect accurate position of Contrast Screen Assembly. (pgs.107 & 108)
10/2002	Correction-2	Corrected P/N for Rear Boards on Exploded View Cover parts list, and added P/N for Mirror Cover. (pg.107)
11/2002	Supplement-1	Replaced MS1 Board with BM1C Board, Updated AD Board and D Board, Updated Exploded View P/Ns, Updated Parts List
1/2003	Correction-3	Convergence Adjustment Procedure (pgs. 48 & 52)
1/2003	Correction-4	Corrected P/N for Caster on Exploded View Chassis parts list. (pg.109)1/2003
9/2003	Correction-5	Corrected A PWB Component and Conductor side (pg. 75& 76))
10/2004	Removed Note from section 2-12-1. Setup For Adjustment. Note is intended for use by the factory during production, and should not be performed by service technicians.Replaced Pg. 48 with Pg. 48	

COLOR REAR VIDEO PROJECTOR

SONY®

Self Diagnosis
Supported model

SERVICE MANUAL

DA-4X CHASSIS

MODEL NAME	REMOTE COMMANDER	DESTINATION	CHASSIS NO.
KP-57WV600	RM-Y188	US/CND	SCC-P92D-A
KP-57WV700	RM-Y188	US/CND	SCC-P92B-A
KP-65WV600	RM-Y188	US/CND	SCC-P92C-A
KP-65WV700	RM-Y188	US/CND	SCC-P92A-A

KP-57WV600

RM-Y188

COLOR REAR VIDEO PROJECTOR

SONY®

9-965-926-09

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SPECIFICATIONS

Power Requirements 120V AC, 60Hz

Power Consumption (W)
In Use (Max) 295W
In Standby 1 W

Inputs/Outputs

DVI-HDTV
1 terminal, 3.3V T.M.D.S., 50 ohms
The DVI-HDTV input terminal is compliant with the EIA-861 standard and is not intended for use with personal computers.

Video (IN)
4 total (1 on front panel)
1Vp-p, 75ohms unbalanced, sync negative

S Video (IN)
3 total (1 on front panel)
Y: 1Vp-p, 75ohms unbalanced, sync negative
C: 0.286Vp-p (Burst signal), 75ohms

Audio (IN)
7 total (1 on front panel)
500 mVrms (100% modulation)
Impedance:47 kilohm

Component Video Input
2 total
Y: 1.0 Vp-p, 75 ohms unbalanced, sync negative;
P_B: 0.7 Vp-p, 75 ohms;
P_R: 0.7 Vp-p, 75 ohms

Control S (IN/OUT)
Variable/Fixed Audio (OUT)
More than 408 m Vrms at the maximum volume setting (Variable)
More than 408 m Vrms (Fixed) Impedance (output):2 kilohms

	KP-57WV600 **KP-57WV700**	**KP-65WV600**	**KP-65WV700**
Speaker Output (W)	20W x 2		
Dimensions (W x H x D) **mm** **in**	1361 x 1394 x 689 mm $53^{5/8}$ x $54^{15/16}$ x $27^{1/8}$ in	1542 x 1516 x 735 mm $60^{3/4}$ x $59^{3/4}$ x $28^{15/16}$ in	
Mass kg **lbs**	98 kg 216 lbs	136 kg 300 lbs	134 kg 295 lbs

Projection System
3 picture tubes, 3 lenses, horizontal in-line system

Picture Tube
7-inch high-brightness monochrome tubes (6.3 raster size), with optical coupling and liquid cooling system.

Projection Lenses
High performance, large diameter hybrid lens F1.1

Antenna
75 ohm external terminal for VHF/UHF

Television System
NTSC, American TV Standard

Channel Coverage
VHF: 2-13/ VHF: 14-69/ CATV: 1-125

Screen Size (measured diagonally)
57 inches (KP-57WV600/57WV700)
65 inches (KP-65WV600/65WV700)

Supplied Accessories
Remote Control RM-Y188
Batteries (2) size AA (R6)

Optional Accessories
A/V Cable (VMC-810/820/830 HG)
Audio Cable (RKC-515HG)
Component Video Cable (VMC-10/30 HG)
Control S Cable (RK-G69HG)
Memory Stick media:
  8 MB (MSA-8A)
  16 MB (MSA-16A)
  32 MB (MSA-32A)
  64 MB (MSA-64A)
  128 MB (MSA-128A)

Design and specifications are subject to change without notice.

WARNINGS AND CAUTIONS

CAUTION

Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield, or carbon painted on the CRT, after removing the anode.

WARNING!!

An isolation transformer should be used during any service to avoid possible shock hazard, because of live chassis. The chassis of this receiver is directly connected to the ac power line.

⚠ SAFETY-RELATED COMPONENT WARNING!!

Components identified by shading and ⚠ mark on the schematic diagrams, exploded views, and in the parts list are critical for safe operation. Replace these components with Sony parts whose part numbers appear as shown in this manual or in supplements published by Sony. Circuit adjustments that are critical for safe operation are identified in this manual. Follow these procedures whenever critical components are replaced or improper operation is suspected.

ATTENTION!!

Apres avoir deconnecte le cap de l’anode, court-circuiter l’anode du tube cathodique et celui de l’anode du cap au chassis metallique de l’appareil, ou la couche de carbone peinte sur le tube cathodique ou au blindage du tube cathodique.

Afin d’eviter tout risque d’electrocution provenant d’un chássis sous tension, un transformateur d’isolement doit etre utilisé lors de tout dépannage. Le chássis de ce récepteur est directement raccordé à l’alimentation du secteur.

⚠ ATTENTION AUX COMPOSANTS RELATIFS A LA SECURITE!!

Les composants identifies par une trame et par une marque ⚠ sur les schemas de principe, les vues explosees et les listes de pieces sont d’une importance critique pour la securite du fonctionnement. Ne les remplacer que par des composants Sony dont le numero de piece est indique dans le present manuel ou dans des supplements publies par Sony. Les reglages de circuit dont l’importance est critique pour la securite du fonctionnement sont identifies dans le present manuel. Suivre ces procedures lors de chaque remplacement de composants critiques, ou lorsqu’un mauvais fonctionnement suspecte.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are “pinched” or touching high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cords for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the B+ and HV to see if they are specified values. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
8. Check the antenna terminals, metal trim, “metallized” knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

Leakage Test

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers’ instructions to use these instructions.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The “limit” indication is 0.75 V, so analog meters must have an accurate low voltage scale. The Simpson’s 250 and Sanwa SH-63TRD are examples of passive VOMs that are suitable. Nearly all battery-operated digital multimeters that have a 2 VAC range are suitable (see Figure A).

How to Find a Good Earth Ground

A cold-water pipe is a guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms.

If a cold-water pipe is not accessible, connect a 60- to 100-watt trouble-light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side on the line; the lamp should light at normal brilliance if the screw is at ground potential (see Figure B).

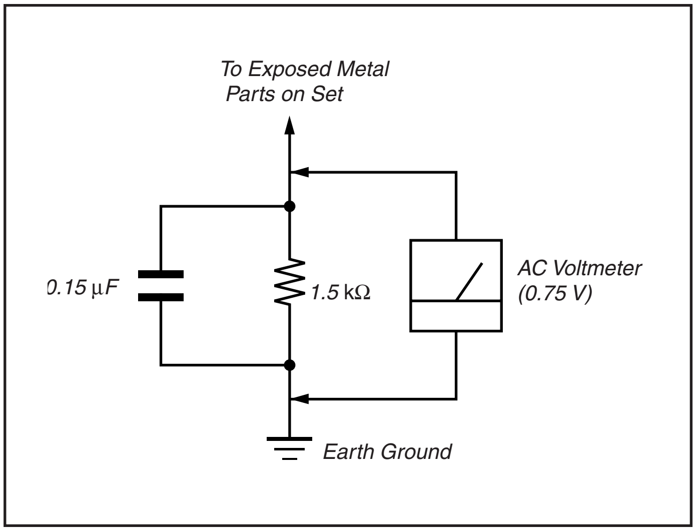


Figure A. Using an AC voltmeter to check AC leakage.

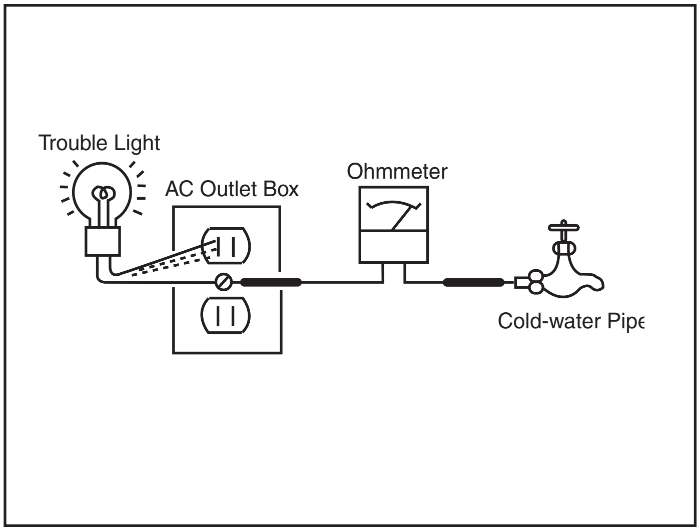


Figure B. Checking for earth ground.

SELF-DIAGNOSTIC FUNCTION

Self Diagnosis Supported model

The units in this manual contain a self-diagnostic function. If an error occurs, the STANDBY/TIMER LED will automatically begin to flash. The number of times the LED flashes translates to a probable source of the problem. A definition of the STANDBY/TIMER LED flash indicators is listed in the instruction manual for the user's knowledge and reference. If an error symptom cannot be reproduced, the Remote Commander can be used to review the failure occurrence data stored in memory to reveal past problems and how often these problems occur.

Diagnostic Test Indicators

When an error occurs, the STANDBY/TIMER LED will flash a set number of times to indicate the possible cause of the problem. If there is more than one error, the LED will identify the first of the problem areas.

Results for all of the following diagnostic items are displayed on screen. If the screen displays a "0", no error has occurred.

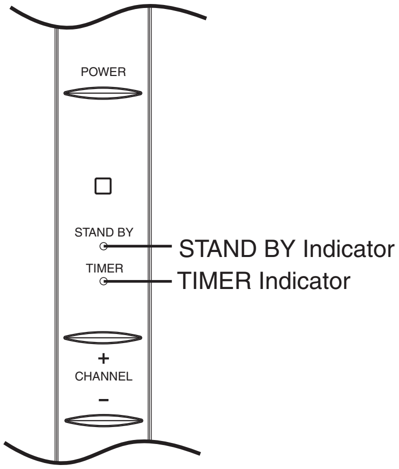
Diagnostic Item	No. of times STANDBY / TIMER lamp flashes	Display Result	Probable Cause Location	Detected Symptoms
Power does not turn on	Does not light	_______	• Power cord is not plugged in. • Fuse is burned out (F501). (A Board)	• Power does not come on. • No power is supplied to the TV. • AC Power supply is faulty.
+B Overcurrent (OCP)*	2 times	2:0 or 2:1	• H.OUT (Q8024) is shorted. (D Board) • +B PWM (Q8035) is shorted. (D Board)	• Power does not come on. • Load on power line shorted.
Low +B Overvoltage (OVP)	3 times	3:0 or 3:1	• IC6504 is faulty. (D Board)	• Has entered standby mode.
Vertical Deflection Stopped	4 times	4:0 or 4:1	• 15V is not supplied. (D Board) • IC8003 is faulty. (D Board)	• Has entered standby mode after Horizontal raster. • Vertical deflection pulse is stopped. • Power line is shorted or power supply is stopped.
White Balance Failure (not balanced)	5 times	5:0 or 5:1	• Video OUT (IC9101, IC9201, IC9301) is faulty. (CR, CG, CB Board) • CRT drive (IC2801) is faulty. (B Board) • G2 is improperly adjusted.**	• No raster is generated. • CRT cathode current detection reference pulse output is small.
LOW +B OCP/OVP (overcurrent/overvoltage)***	6 times	6:0 or 6:1	• +5 line is overloaded. (A, B, M Boards) • +5 line is shorted. (A, B, M Boards) • IC504 is faulty. (A Board)	• No picture
Horizontal Deflection Stopped	7 times	7:0 or 7:1		• No picture

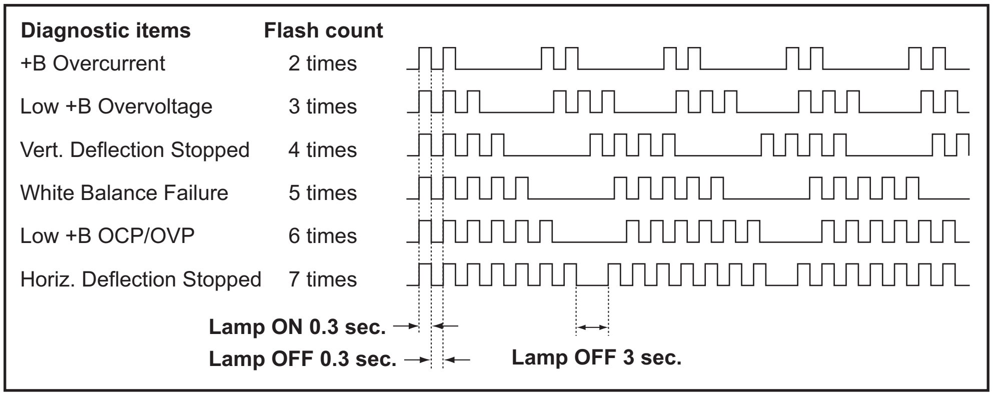
* If a +B overcurrent is detected, stoppage of the vertical deflection is detected simultaneously. The symptom that is diagnosed first by the microcontroller is displayed on the screen.

** Refer to Screen (G2) Adjustment (Fine Adjustments) in Section 2 of this manual.

*** If STANDBY/STEREO LED flashes six (6) times, unplug the unit and wait 10 seconds before performing the adjustment.

Display of Standby/Timer LED Flash Count





Diagnostic items	Flash count
+B Overcurrent	2 times
Low +B Overvoltage	3 times
Vert. Deflection Stopped	4 times
White Balance Failure	5 times
Low +B OCP/OVP	6 times
Horiz. Deflection Stopped	7 times

Release of TIMER STAND BY indicator blinking

The TIMER/STANDBY indicator blinking display is released by turning OFF the power switch on the TV main unit or removing the plug from the power.

Self-Diagnosis Screen Displays

In cases of malfunctions where it is not possible to determine the symptom such as when the power goes off occasionally or when the screen disappears occasionally, there is a screen display on whether the malfunction occurred or not in the past (and whether the detection circuit operated or not) in order to allow confirmation.

Screen Display Method

Quickly press the remote command button in the following order from the standby state.

Display → Channel 5 → Sound Volume* – → Power ON

*Note that this differs from entering the service mode (sound volume +)

```
SELF DIAGNOSIS
2: +B OCP        0
3: +B OVP        0
4: VSTOP         0
5: AKB           1
6: LOWB          0
7: H-STOP        0
101: WDT         24
```

Numeral "0"
means that no fault was detected.

Numeral "1"
means a fault was detected one time only.

Self-Diagnosis Screen Display

The results display is not automatically cleared. In case of repairs and after repairs, check the self-diagnosis screen and be sure to return the results display to " 0 ".

If the results display is not returned to " 0 " it will not be possible to judge a new malfunction after completing repairs.

Method of Clearing Results Display

1. Power off (Set to the stanby mode.)
2. Display → Channel 5 → Sound Volume + → Power ON (Service Mode)
3. Channel 8 → ENTER (Test reset = Factory preset condition)

Method of Ending Self Diagnosis Screen

When ending the self-diagnosis screen completely, turn the power switch OFF on the remote commander or the main unit.

Self-Diagnosis Function Operation

+B overcurrent (OCP)
Occurs when excessive current flows through R5013. The increase in voltage across R5013 causes the output of Q5004 to go high, and this high signal goes to the micro.

+B overvoltage (OVP)
IC6505 detects +B OVP condition and turns on Q6522. This sends a high signal to the micro and also shuts down the AC relay.

V-STOP
Occurs when an absence of the vertical deflection pulse is detected by pin 24 of IC2801 (B Board). Power supply will shut down when waveform interval exceeds 2 seconds.

White Balance Failure
If the RGB levels* do not balance within 2 seconds after the power is turned on, this error will be detected by IC2801. TV will stay on, but there will be no picture.

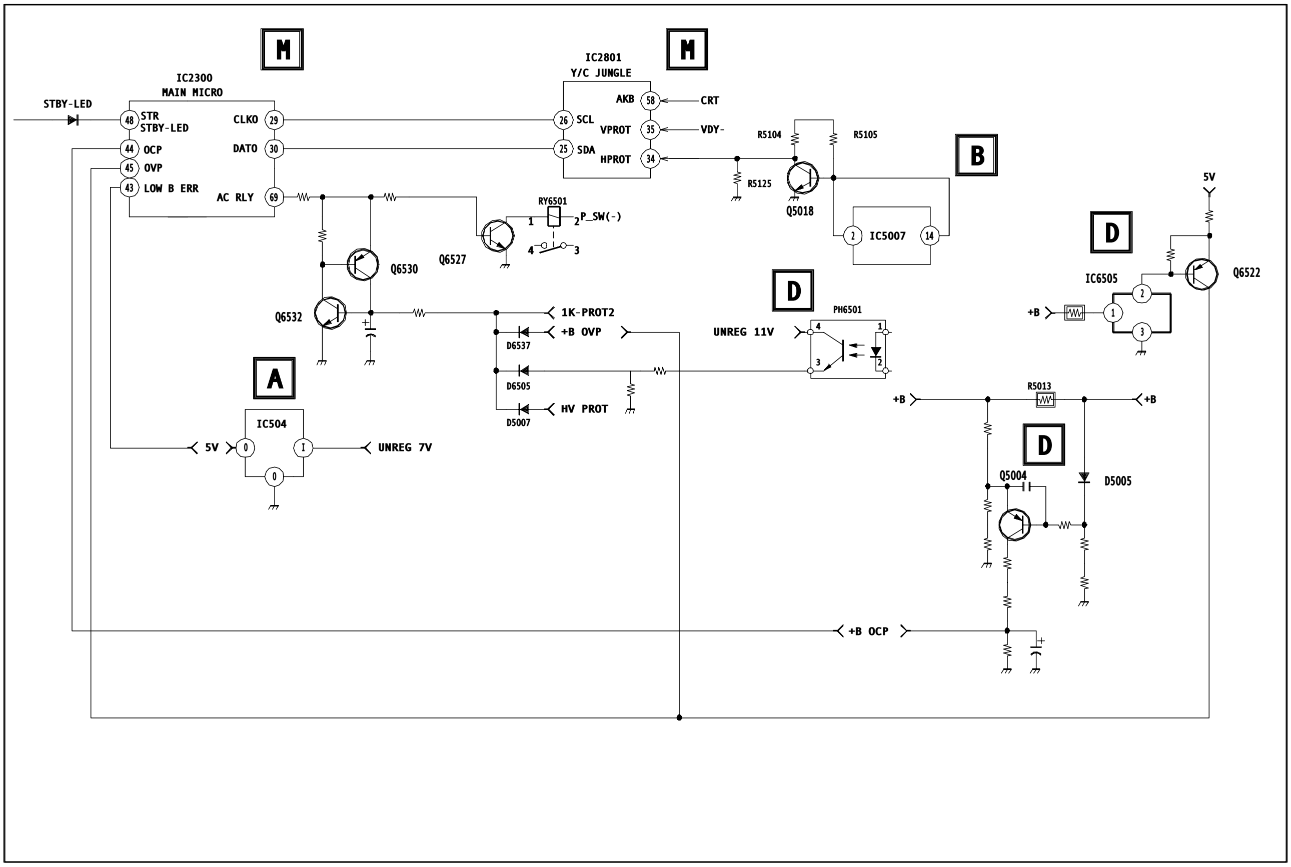
*(Refers to the RGB levels of the AKB detection Ref pulse that detects 1K).

Low B OCP/OVP
Occurs when set 5V is out.

Horizontal Deflection Stopped
Occurs when either:

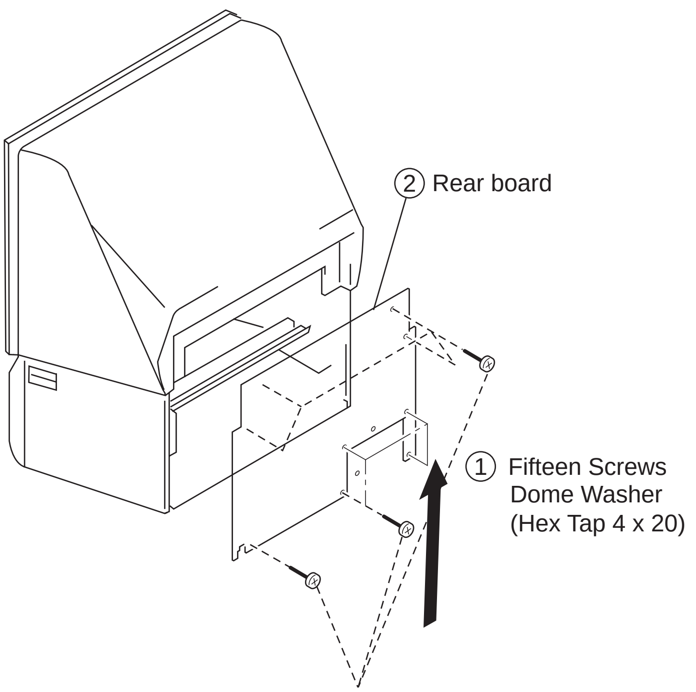
1) a +B overcurrent is detected (IC5007), or
2) overheating is detected (Thermistor TH5002).

Self-Diagnosis Block Diagram

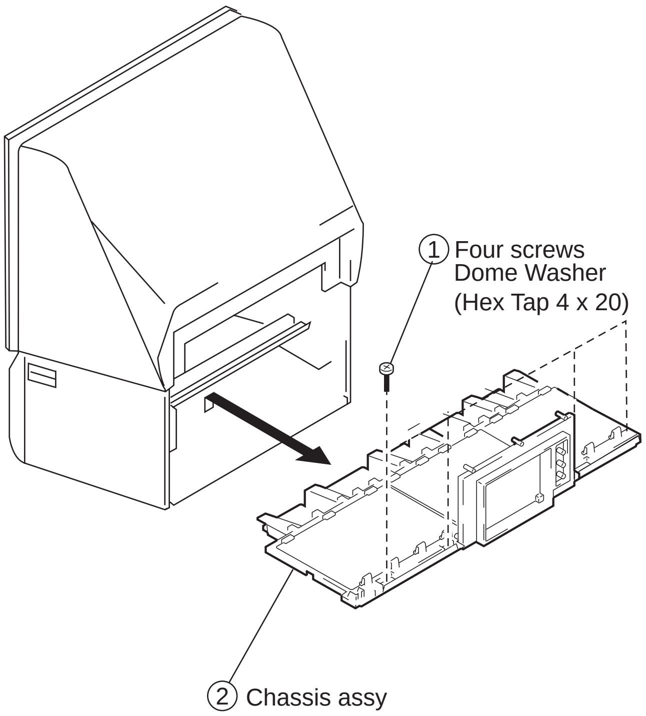

M
IC2300
MAIN MICRO
STBY-LED
48 STR STBY-LED
44 OCP
45 OVP
43 LOW B ERR
CLKO 29
DATO 30
AC RLY 69
M
IC2801
Y/C JUNGLE
AKB 58
CRT
26 SCL
VPROT 35
VDY-
25 SDA
HPROT 34
R5104
R5105
R5125
Q5018
B
2 IC5007 14
RY6501
1
2
P_SW(-)
4
3
Q6527
Q6530
Q6532
1K-PROT2
+B OVP
D6537
D6505
HV PROT
D5007
D
PH6501
UNREG 11V
4
1
3
2
A
IC504
5V
O
I
UNREG 7V
D
5V
IC6505
Q6522
+B
1
2
3
R5013
+B
+B
D
Q5004
D5005
+B OCP

SECTION 1: DISASSEMBLY

1-1. REAR BOARD REMOVAL


② Rear board
① Fifteen Screws
Dome Washer
(Hex Tap 4 x 20)

1-2. CHASSIS ASSEMBLY REMOVAL

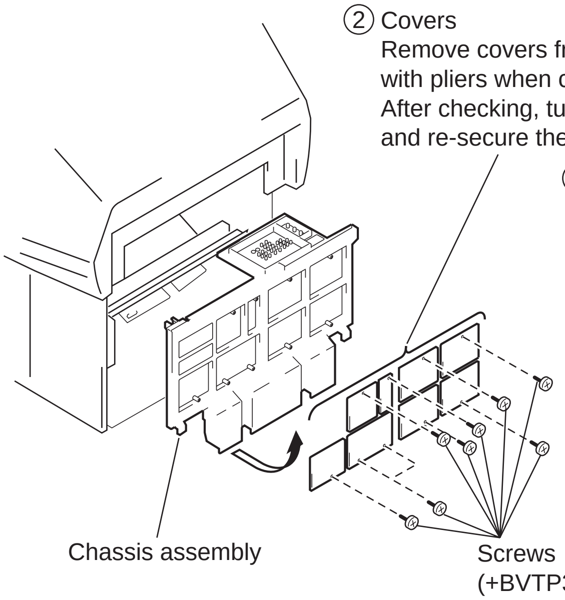

① Four screws
Dome Washer
(Hex Tap 4 x 20)
② Chassis assy

1-3. SERVICE POSITION

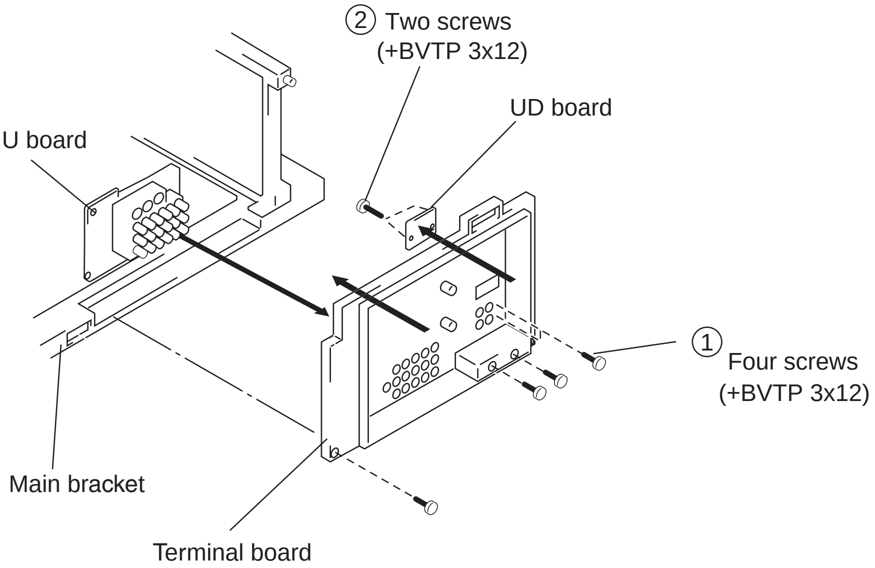
① Free wiring from purse locks.
NOTE: Observe wire dress
and return to original condition.

② Covers
Remove covers from chassis assembly
with pliers when checking printed circuit boards.
After checking, turn the covers over
and re-secure them with the screws.

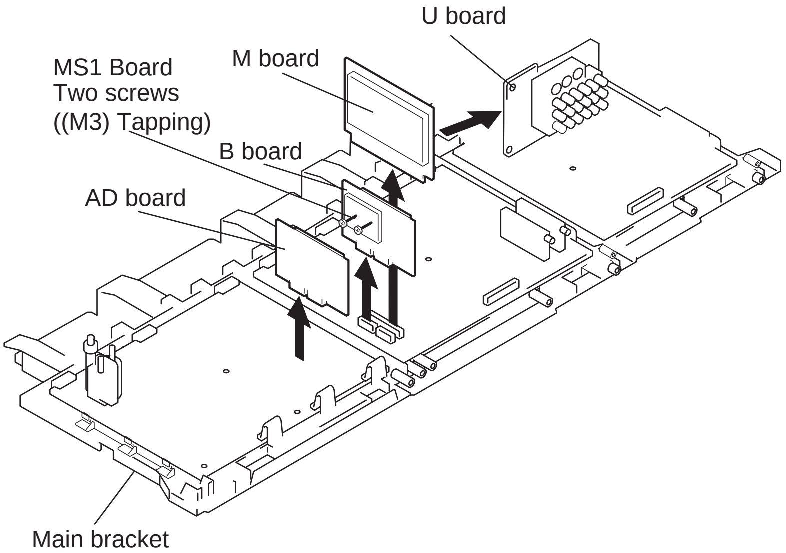
③ When plugging in connector from
HM Board to B Board at CN3603
insure two brown wires are facing
upward towards the HV block
assembly.


Chassis assembly
Screws
(+BVTP3x12)

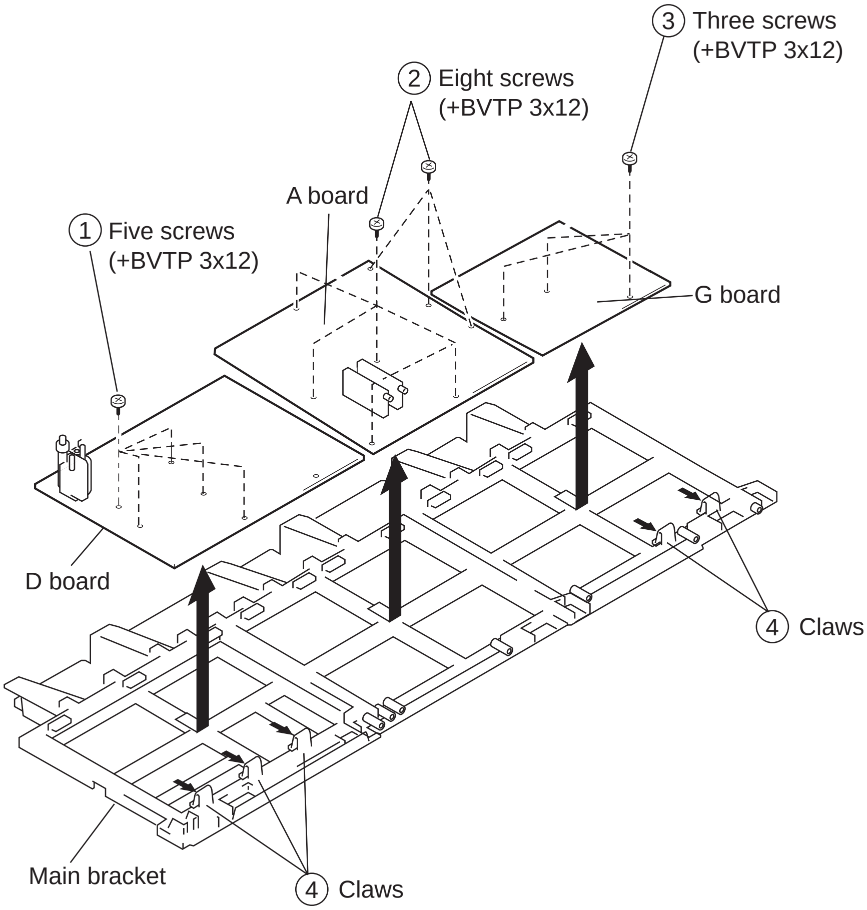
1-4. TERMINAL BOARD AND UD BOARD REMOVAL


② Two screws
(+BVTP 3x12)
UD board
U board
① Four screws
(+BVTP 3x12)
Main bracket
Terminal board

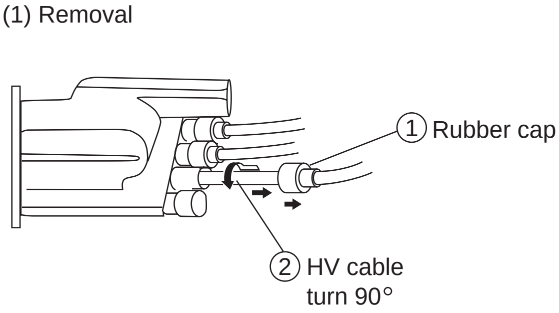
1-5. AD BOARD, B BOARD, M BOARD, MS1 BOARD, AND U BOARD REMOVAL

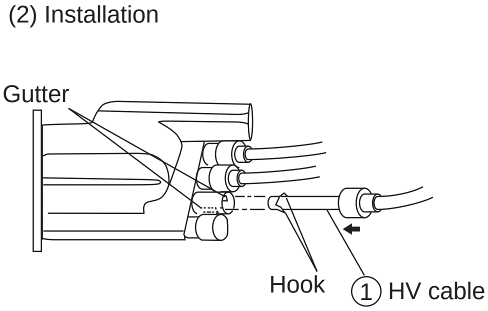

U board
MS1 Board
Two screws
((M3) Tapping)
M board
B board
AD board
Main bracket

1-6. D BOARD, A BOARD, AND G BOARD REMOVAL


③ Three screws
(+BVTP 3x12)
② Eight screws
(+BVTP 3x12)
A board
① Five screws
(+BVTP 3x12)
G board
D board
④ Claws
Main bracket
④ Claws

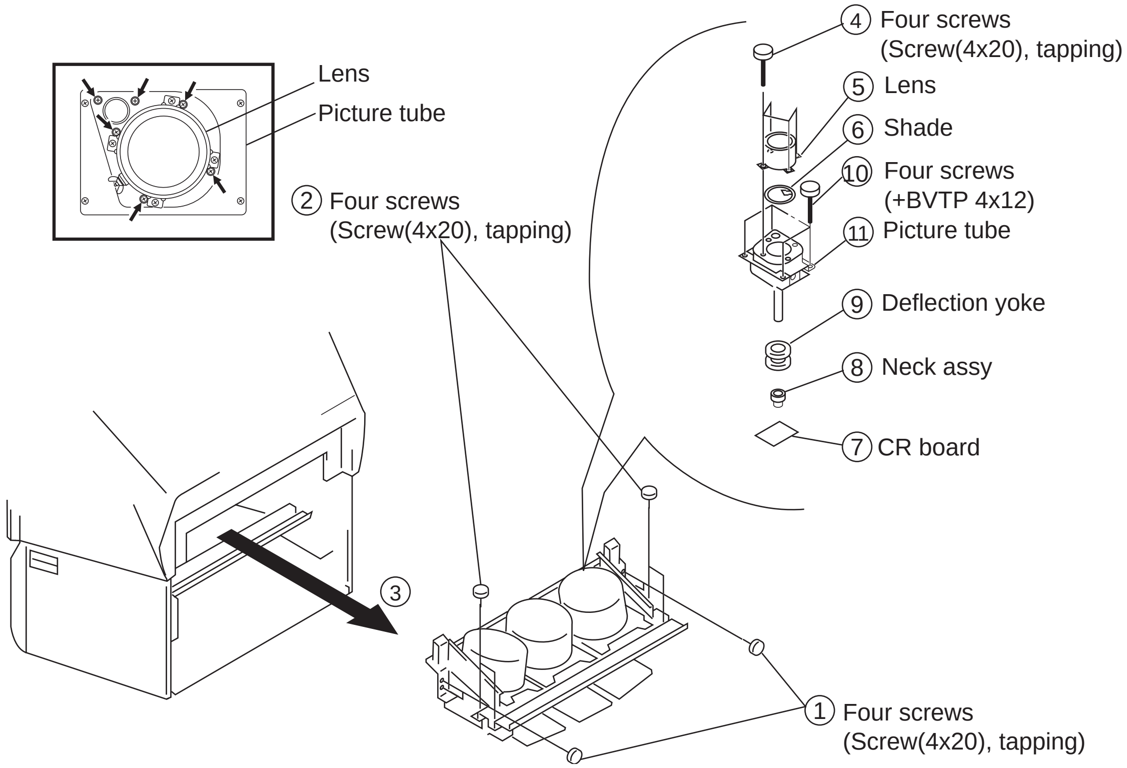
1-7. HIGH-VOLTAGE CABLE INSTALLATION AND REMOVAL


(1) Removal
① Rubber cap
② HV cable
turn 90°

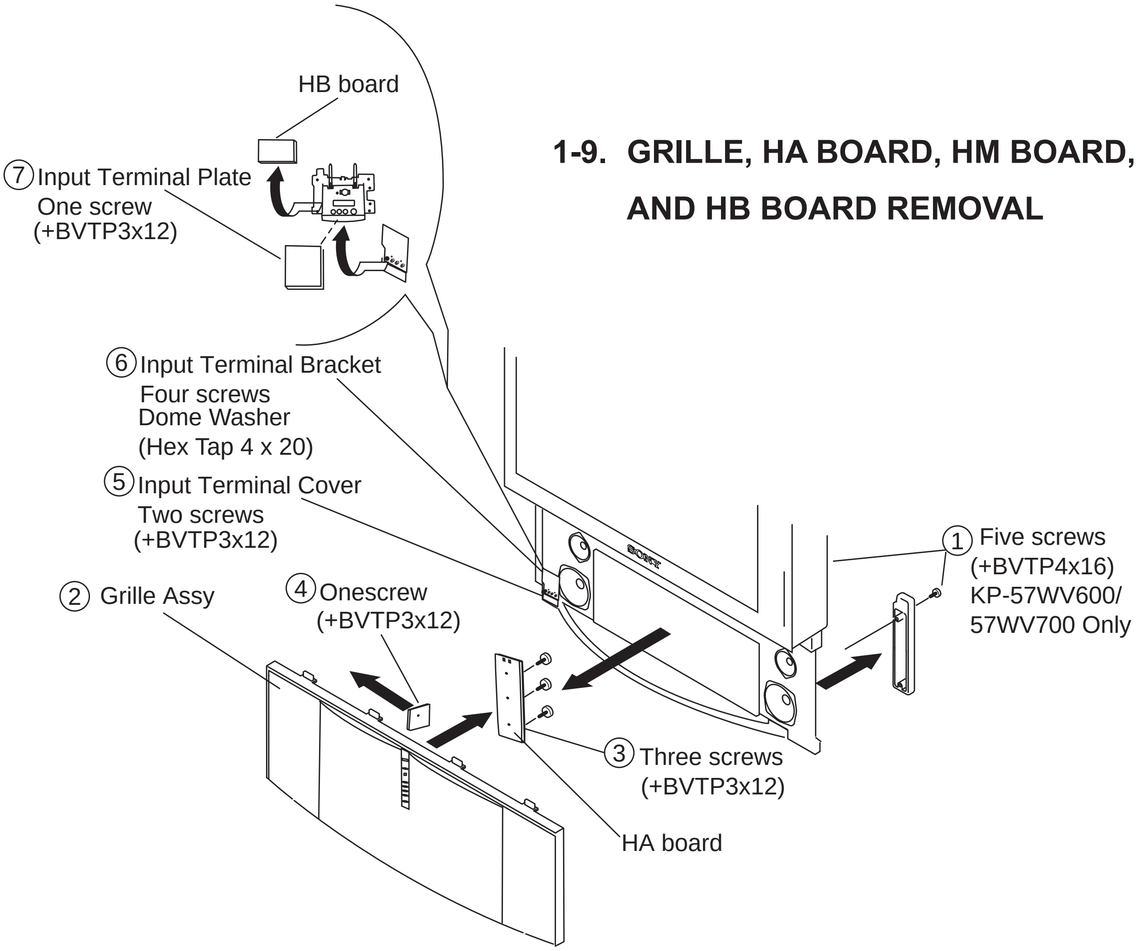

(2) Installation
Gutter
Hook
① HV cable

1-8. PICTURE TUBE REMOVAL

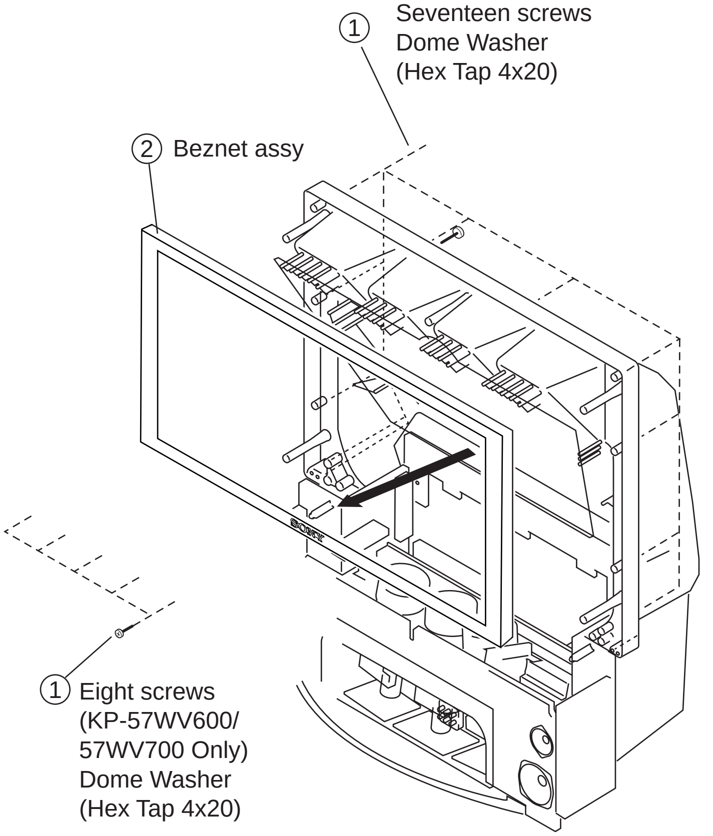
CAUTION: Removing the arrow-marked screws is strictly prohibited. If removed, it may cause liquid to spill.


Lens
Picture tube
② Four screws
(Screw(4x20), tapping)
③
④ Four screws
(Screw(4x20), tapping)
⑤ Lens
⑥ Shade
⑩ Four screws
(+BVTP 4x12)
⑪ Picture tube
⑨ Deflection yoke
⑧ Neck assy
⑦ CR board
① Four screws
(Screw(4x20), tapping)

1-9. GRILLE, HA BOARD, HM BOARD, AND HB BOARD REMOVAL

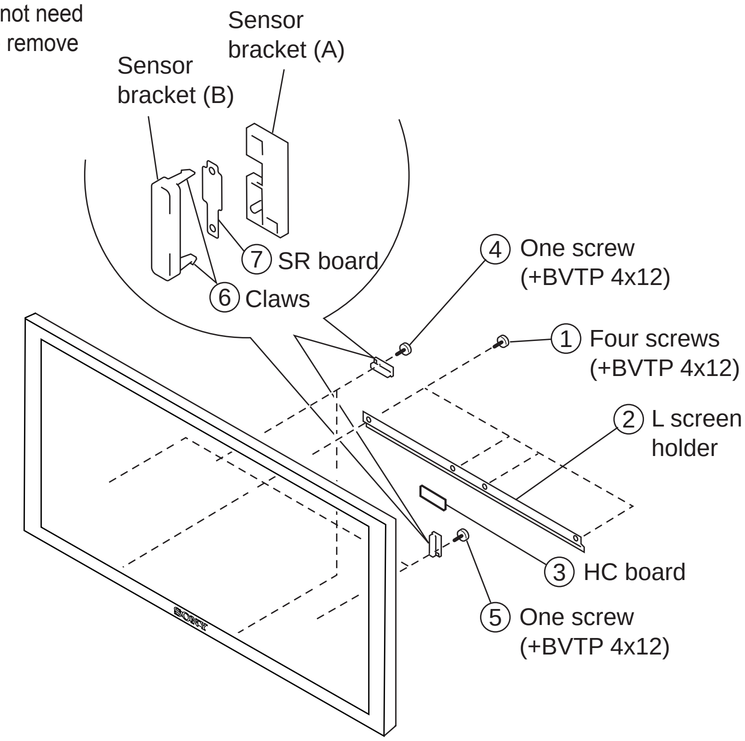

HB board
⑦ Input Terminal Plate
One screw
(+BVTP3x12)
⑥ Input Terminal Bracket
Four screws
Dome Washer
(Hex Tap 4 x 20)
⑤ Input Terminal Cover
Two screws
(+BVTP3x12)
② Grille Assy
④ Onescrew
(+BVTP3x12)
① Five screws
(+BVTP4x16)
KP-57WV600/
57WV700 Only
③ Three screws
(+BVTP3x12)
HA board

1-10. BEZNET ASSEMBLY REMOVAL

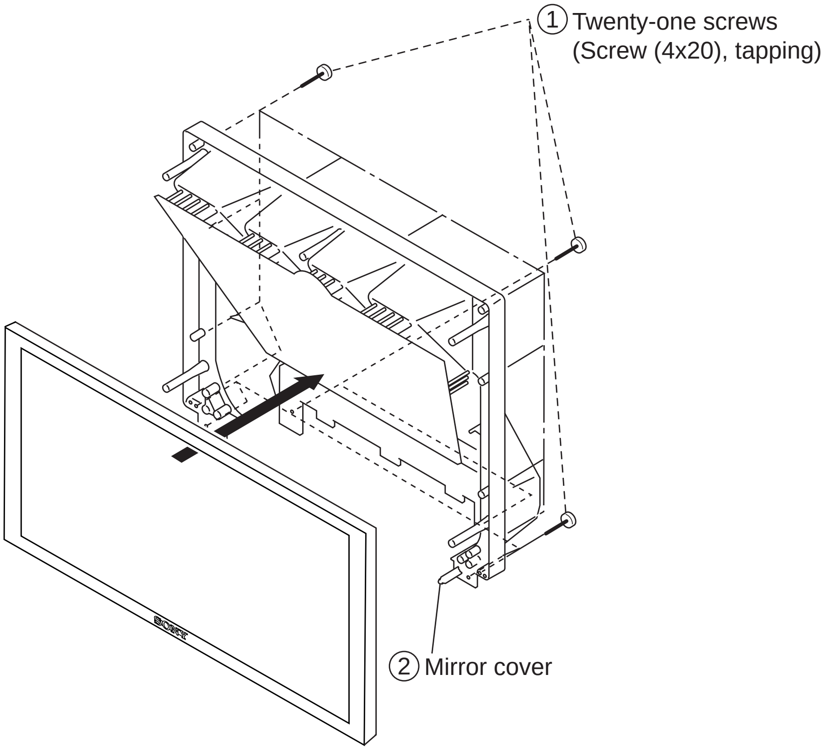

① Seventeen screws
Dome Washer
(Hex Tap 4x20)
② Beznet assy
① Eight screws
(KP-57WV600/
57WV700 Only)
Dome Washer
(Hex Tap 4x20)

1-11. SR BOARD REMOVAL

The Screen Holder does not need to be removed in order to remove the SR boards.


Sensor
bracket (A)
Sensor
bracket (B)
⑦ SR board
⑥ Claws
④ One screw
(+BVTP 4x12)
① Four screws
(+BVTP 4x12)
② L screen
holder
③ HC board
⑤ One screw
(+BVTP 4x12)

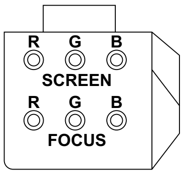
1-12. MIRROR COVER REMOVAL (KP-57WV600/57WV700 ONLY)


① Twenty-one screws
(Screw (4x20), tapping)
② Mirror cover

SECTION 2: SET-UP ADJUSTMENTS

2-1. SCREEN VOLTAGE ADJUSTMENT (G2) (COARSE ADJUSTMENT)

1. Receive the Monoscope signal..
2. Set BRIGHTNESS to 50% and PICTURE to minimum.
3. Turn the red VR on the focus block all the way to the left and then gradually turn it to the right until the retrace line is barely visible.
4. Gradually turn the control to the left until the retrace line disappears.

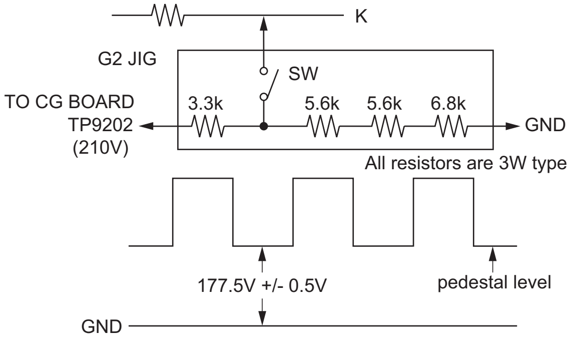


FOCUS Block

2-2. SCREEN (G2) ADJUSTMENT (FINE ADJUSTMENT)

If the jig described below is available, it is recommended that the G2 Fine Mode Adjustment be performed to set the screen controls to their optimal condition. If desired, you can build the jig illustrated below, using 3-watt resistors. Please note that if the proper voltage is not obtained with the listed resistor's values, then increase or decrease one of the values in the resistor network to obtain the correct voltage.

1. Select VIDEO-1 mode no signal applied (the screen must be black).
2. Connect the G2 JIG.
3. SW on JIG.
4. Connect an oscilloscope to the TP9101(KR), TP9201(KG) and TP9301(KB) of CR board, CG board, and CB board.
5. Adjust red, green, and blue screen voltage to 177.5+/-0.5V with screen VR on the focus block.

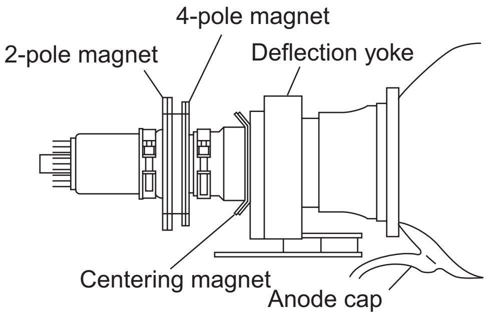


2-3. DEFLECTION YOKE TILT ADJUSTMENT

1. Connect the color bar generator monoscope patter to Video 1 input.
2. Cover the red and blue CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
3. Loosen the CRT's deflection yoke set screw and align the tilt of the deflection yoke so that the horizontal bars at the center of the cross-hatch pattern are parallel to the top and bottom edges of the screen.
4. After aligning the deflection yoke fasten it securely to the funnel-shaped portion (neck) of the CRT.
5. Cover the green and blue CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps), then repeat steps 3 and 4 for the red CRT.

   Cover the green and red CRT lenses with lens caps o allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps), then repeat steps 3 and 4 for the blue CRT.

Note: If lens caps are unavailable, you can cut off the unnecessary color beams by controlling the service mode 2170P-2 RGBS.

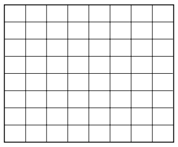


2-4. FOCUS LENS ADJUSTMENT

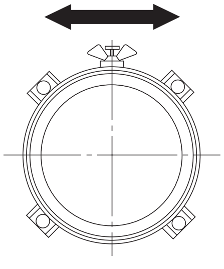
In this adjustment, use the remote commander while in service mode. For details on the usage of the service mode and the remote commander, please refer to section
2-10. ELECTRICAL ADJUSTMENTS BY REMOTE COMMANDER.

1. Loosen the lens screw.
2. Cover the red and blue CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
3. Turn the green lens to adjust to the optimum focus point with the crosshatch signal.
4. Tighten the lens screw.
5. Cover the green and blue CRT lenses with the lens caps to allow only red to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
6. Turn the red lens to adjust to the optimum focus point with the crosshatch signal.
7. Tighten the lens screw.
8. Cover the green and red CRT lenses with the lens caps to allow only blue to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
9. Turn the blue lens to adjust to the optimum focus point with the crosshatch signal.
10. Tighten the lens screw.
11. After adjusting the items:
    2-5. FOCUS VR ADJUSTMENT,
    2-6. 2-POLE MAGNET ADJUSTMENT,
    2-8. 4-POLE MAGNET ADJUSTMENT,
    reconfirm the optimum focus point and adjust again if necessary.

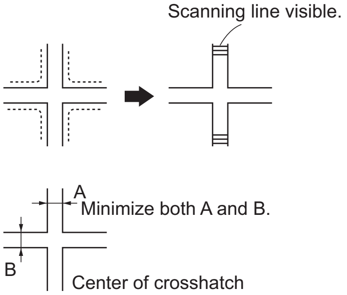
* In PJE mode, every time 6 is pressed, the test signal changes to:
“crosshatch+video signal” → “crosshatch+borderline(black)” → ”crosshatch(black)” → “dots(black)” → off



Test Signal



Lens

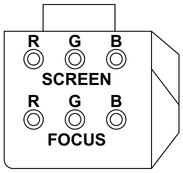


Note: If lens caps are unavailable, you can cut off the unnecessary color beams by controlling the service mode 2170P-2 1 RGBS.

2-5. FOCUS VR ADJUSTMENT

1. Set generator to crosshatch.
2. Cover the red and blue CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
3. Turn the green focus VR on the focus block to adjust to the optimum focus point with the crosshatch signal.
4. Cover the green and blue picture lenses with lens caps to allow only red to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
5. Turn the red focus VR on the focus block to adjust to the optimum focus point with the crosshatch signal.
6. Cover the green and red picture lenses with lens caps to allow only blue to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
7. Turn the blue focus VR on the focus block to adjust to the optimum focus point with the crosshatch signal.
8. After adjusting the items:
    2-4. FOCUS LENS ADJUSTMENT,
    2-6. 2-POLE MAGNET ADJUSTMENT,
    2-8. 4-POLE MAGNET ADJUSTMENT,
    reconfirm the optimum focus point and adjust again if necessary.

Note: If lens caps are unavailable, you can cut off the unnecessary color beams by controlling the service mode 2170P-2 1 RGBS.

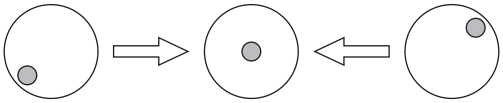


FOCUS Block

2-6. 2-POLE MAGNET ADJUSTMENT

1. Set the picture mode to PRO and picture to MAX.
2. Receive the Dot signal.
3. Cover the red and blue CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
4. Turn the green focus VR on the focus block to the left (counter clockwise) and set it to overfocus to enlarge the spot.
5. Adjust the green CRT's 2-pole magnet so that the small bright spot is in the center.
6. Align the green focus VR on the focus block and set it for the best focus.
7. Repeat steps 1 through 6 for the red CRT except now you will cover the green and blue CRT lenses with lens caps to allow only red to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps) and you will adjust the red focus control on the focus block.
8. Repeat steps 1 through 6 for the blue CRT except now you will cover the red and green CRT lenses with lens caps to allow only blue to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps) and you will adjust the blue focus control on the focus block.

Note: If lens caps are unavailable, you can cut off the unnecessary color beams by controlling the service mode 2170P-2 1 RGBS.



2-7. CENTERING MAGNET ADJUSTMENT

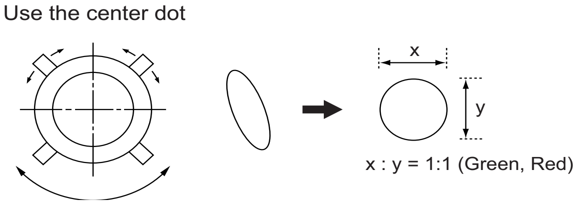
1. Set the picture mode to PRO.
2. Receive the monoscope signal.
3. Cover the red and blue CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
4. Adjust the green CRT's centering magnet to put the center of the monoscope signal to the center of the screen.
5. Repeat steps 1 through 4 for the red CRT except now you will cover the green and blue CRT lenses with lens caps to allow only red to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps) and you will adjust the red centering magnet.
6. Repeat steps 1 through 4 for the blue CRT except now you will cover the red and green CRT lenses with lens caps to allow only blue to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps) and you will adjust the blue centering magnet.

Note: If lens caps are unavailable, you can cut off the unnecessary color beams by controlling the service mode 2170P-2 1 RGBS.

2-8. 4-POLE MAGNET ADJUSTMENT

1. Set the picture mode to PRO and picture to MAX.
2. Receive the Dot signal.
3. Cover the red and blue CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
4. Turn the (green) focus VR on the focus block to the right (clockwise) and set it to under-focus to reduce the spot.
5. Adjust the 4-pole magnet so that the small spot in the center of the screen becomes round for green and red.
6. Adjust the blue spot to an oval shape X:Y=1:1.2
7. Repeat steps 1 through 6 for the red CRT except now you will cover the green and blue CRT lenses with lens caps to allow only red to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps) and you will adjust the red focus control on the focus block.
8. Repeat steps 1 through 6 for the blue CRT except now you will cover the red and green CRT lenses with lens caps to allow only blue to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps) and you will adjust the blue focus control on the focus block.

Note: If lens caps are unavailable, you can cut off the unnecessary color beams by controlling the service mode 2170P-2 1 RGBS.

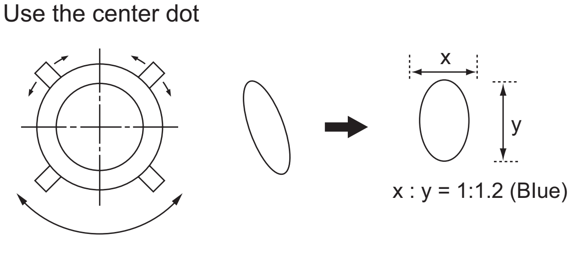


2-9. DEFOCUS ADJUSTMENT (BLUE)

Note: Adjust the blue dot to be slightly larger than red and green dots. This adjustment provides a more pleasing picture to the customer.

1. Set the picture mode to PRO.
2. Receive the Dot signal.
3. Cover the red and green CRT lenses with lens caps to allow only blue to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
4. Turn the blue focus VR on the focus block to the right (clockwise) to make the round dot elliptical.
5. Check the flare with a high luminance signal to make sure the flare is minimal while the dot shape is elliptical.
6. Set the generator to an all white signal and check uniformity.

Note: If lens caps are unavailable, you can cut off the unnecessary color beams by controlling the service mode 2170P-2 1 RGBS.



2-10.ELECTRICAL ADJUSTMENTS BY REMOTE COMMANDER

All of the circuit adjustments can be made by using the remote commander (RM-Y188).

NOTE : The following test equipment is required:

1. Pattern Generator (with component outputs)
2. Frequency counter
3. Digital multimeter
4. Audio oscillator

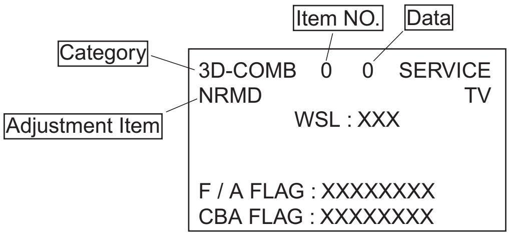
2-10-1.METHOD OF ENTERING THE SERVICE ADJUSTMENT MODE

SERVICE MODE PROCEDURE

1. TV must be in Standby mode. (Power off)
2. Press “DISPLAY”, “5”, “VOL +”, then “POWER” on the remote commander.

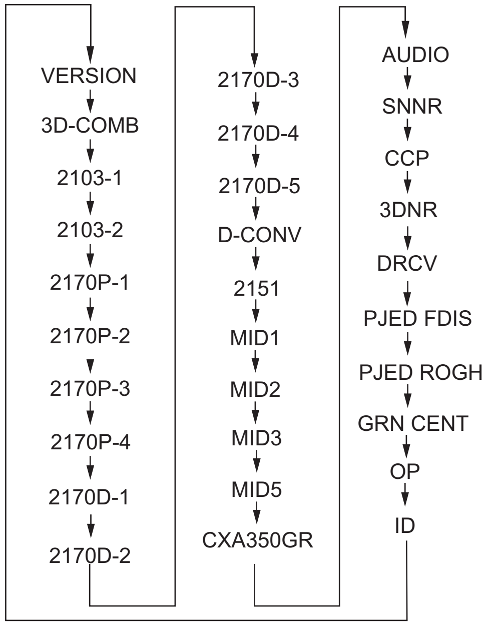
   (Press each button within 1 second of pressing the previous button.)

SERVICE MODE ADJUSTMENT


Item NO.
Data
Category
Adjustment Item
3D-COMB 0 0 SERVICE
NRMD TV
WSL : XXX
F / A FLAG : XXXXXXXX
CBA FLAG : XXXXXXXX

3. The screen displays the item being adjusted within that category.
4. Press 1 or 4 on the remote commander to select the adjustment item
5. Press 3 or 6 on the remote commander to change the data
6. Press 2 or 5 on the remote commander to select the adjustment category

   Every time you press 2(Category up), service mode changes in the order shown below:


VERSION
3D-COMB
2103-1
2103-2
2170P-1
2170P-2
2170P-3
2170P-4
2170D-1
2170D-2
2170D-3
2170D-4
2170D-5
D-CONV
2151
MID1
MID2
MID3
MID5
CXA350GR
AUDIO
SNNR
CCP
3DNR
DRCV
PJED FDIS
PJED ROGH
GRN CENT
OP
ID

7. If you want to go back to the most recently saved value, press “0” then “ENTER” to read the memory.
8. Press “MUTING” then “ENTER” to write the new adjustment data into memory.
9. Turn power off when you want to exit the service mode.

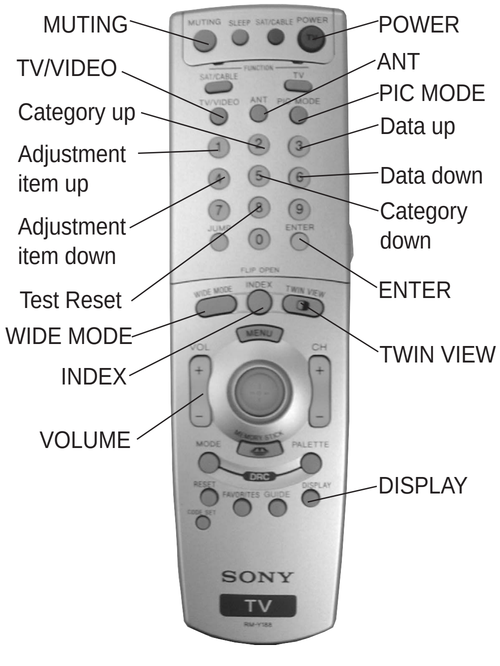
Note: Press “8” then “ENTER” on the remote commander to restore the factory settings for user controls and channel memories (this will also turn set off and then on to exit the service mode).

2-10-2.MEMORY WRITE CONFIRMATION METHOD

1. After adjustment, turn the power off with the remote commander.
2. Turn the power ON and set to service mode.
3. Cycle through the adjusted items again and confirm that the adjustments were saved.

2-10-3.ADJUSTING BUTTONS AND INDICATOR

Note: When the PJE mode (which displays an internally generated signal) is activated, several buttons on the remote commander will have different functions than the ones listed below. Therefore, when in the PJE mode, refer to section 2-12-3 for button functions.


MUTING
TV/VIDEO
Category up
Adjustment item up
Adjustment item down
Test Reset
WIDE MODE
INDEX
VOLUME
POWER
ANT
PIC MODE
Data up
Data down
Category down
ENTER
TWIN VIEW
DISPLAY

RM-Y188

2-11 SERVICE DATA LISTS

♥ WV600 and WV700 are different

CATEGORY	#	ITEM	DESCRIPTION	DATA								
VERSION	0	VER	Software version display	0								
	1	DMY1		255								
3DCOMB	0	NRMD	Noise Reduction Mode	0								
	1	CLKS	Forced Clock System	1								
	2	NSDS	Non-Standard/Standard Signal Processing	0								
	3	MSS	Frame / Line Processing	0								
	4	KILS	Color Killer Setting	1								
	5	FRZE	External Memory Test Bit	0								
	6	EXCS	External C Sync Input (CSI Pin)	1								
	7	CDL	C Signal Output Delay	3								
	8	DYCO	Y Motion Detection Coring	NRMD = 0	2	NRMD = 1	2	NRMD = 2	2	NRMD = 3	2	
	9	DYGA	Y Motion Detection Gain	NRMD = 0	10	NRMD = 1	10	NRMD = 2	10	NRMD = 3	10	
	10	DCCO	C Motion Detection Coring	NRMD = 0	5	NRMD = 1	5	NRMD = 2	5	NRMD = 3	5	
	11	DCGA	C Motion Detection Gain	NRMD = 0	5	NRMD = 1	5	NRMD = 2	5	NRMD = 3	5	
	12	WSC	Noise Detection Amount	1								
	13	WSS	Noise Detection Pre-Filter Type	0								
	14	VAPG	Vertical Apperature Gain	Vivid	0	Standard	0	Movie	0	Pro	0	
	15	VAPI	Vertical Apperature Convergence Point	Vivid	0	Standard	0	Movie	0	Pro	0	
	16	TEST	Test Bit	0								
	17	YPFT	Y Peaking BPF Center Frequency	RF	Vivid	3	Standard	3	Movie	3	Pro	3
				V1-V4	Vivid	3	Standard	3	Movie	3	Pro	3
				Twin	3							
	18	YPFG	Y Peaking BPF Gain	RF	Vivid	7	Standard	7	Movie	5	Pro	5
				V1-V4	Vivid	5	Standard	5	Movie (WV600) ♥ Movie (WV700) ♥	6 5	Pro	5
				Twin	7							
	19	SEDC	C Detection High-Freq Sensitivity	0								
	20	SEDY	Y Detection Low-Freq Sensitivity	1								
	21	YHCO	Y Output High-Freq Coring	WV700 ♥	2							
				WV600 ♥	3							
	22	YHCG	Y Output High-Freq Gain	0								
	23	SYSP	System Power-down Mode	0								
	24	TES2	Test Bits	0								

SERVICE DATA LISTS

CATEGORY	#	ITEM	DESCRIPTION	DATA										
CXA2103-1 Main YCT	0	YLEV	Y-out input/output gain	RF, V1-V4	17	Others ♣	16							
	1	CLEV	CbCr input/output gain	RF, V1-V4	15	Others ♣	21							
	2	SCON	Sub Contrast	V1-V4 ♣	9	Others ♠	9							
	3	SCOL	Sub Color	V1-V4 ♣	2	Others ♠	2							
	4	SHUE	Sub Hue	V1-V4 ♣	5	Others ♠	11							
	5	YDLY	Y/C Delay	V1-V4	0	Others	0							
	6	SHAP	Sharpness level	V1-V4 (WV600) ♥ V1-V4 (WV700) ♥	11 8	V5, V6 (480i)	4	V7 (480i)	4	Others (WV600 ♥ Others (WV700 ♥	11 6			
	7	SHF0	Sharpness f0	V1-V4	0	V5, V6 (480i)	3	V7 (480i)	3	Others	0			
	8	PREO	Sharpness preshoot:overshoot ratio	V1-V4	3	V5, V6 (480i)	3	V7 (480i)	3	Others	3			
	9	BPF0	Chroma band-pass filter f0 setting	3										
	10	BPFQ	Chroma band-pass filter Q setting	0										
	11	BPSW	Chroma band-pass filter ON/OFF	V1-V4	0	Others	1							
	12	TRAP	Y block chroma trap ON/OFF	0										
	13	LPF	YCbCr output low-pass filter ON/OFF	1										
	14	AFCG	H block PLL loop gain	V1-V4	0	RF	1	Others	0					
	15	CDMD	V countdown system mode	V1-V4	3	RF	3	Others	3					
	16	SSMD	Sync separation circuit	V1-V4	0	RF	0	Others	0	No Signal / Blanking	3			
	17	HMSK	Macrovision signal masking ON/OFF	V1-V4	1	V5, V6 (480i)	1	V7 (480i)	0	Others	1			
	18	HALI	H automatic adjustment function	0										
	19	PPHA	Video and H TIM phase adjustment	V1-V4	7	V5, V6	7	V7 (480i)	7	Others	7			
	20	CBO1	Cb offset of Cb IN (pin 34) input	V5, V6 (480i)	36	Others	34							
	21	CRO1	Cr offset of Cr IN (pin 35) input	V5, V6 (480i)	38	Others	32							
	22	CBO2	Cb offset of DVI Cb (Pin 38) input	25										
	23	CRO2	Cr offset of the DVI Cr (Pin 39) input	27					WV600	WV700				
	24	ATPD	Auto-Pedestal Point (Data is applied to 2103-2 also)	Single Picture	0	Twin: 2170P-4:BLK = 0	0	Twin ♥ 2170P-4:BLK = 1	1	3	Twin 2170P-4:BLK = 2	0	Twin 2170P-4:BLK = 3	0
	25	DCTR	DC transmission ratio (Data is applied to 2103-2 also)	Single Picture	0	Twin 2170P-4:BLK = 0	0	Twin ♥ 2170P-4:BLK = 1	2	3	Twin 2170P-4:BLK = 2	0	Twin 2170P-4:BLK = 3	0
CXA2103-2 Sub-YCT	0	YLEV	Y-out input/output gain	DRC* ♣	14	VDO*	45							
	1	CLEV	CbCr input/output gain	DRC* ♣	7	VDO*	25							
	2	SCON	Sub Contrast	V1-V4** ♣	9	Others** ♠	9							
	3	SCOL	Sub Color	V1-V4** ♣	2	Others** ♠	2							
	4	SHUE	Sub Hue	V1-V4** ♣	5	Others** ♠	11							
	5	YDLY	Y/C Delay	V1-V4**	0	Others**	0							
	6	SHAP	Sharpness level	V1-V4**	6	Others**	6							
	7	SHF0	Sharpness f0	V1-V4**	0	Others**	0							
	8	PREO	Sharpness preshoot:overshoot ratio	V1-V4**	3	Others**	3							
	9	BPF0	Chroma band-pass filter f0 setting	3										
	10	BPFQ	Chroma band-pass filter Q setting	0										
	11	BPSW	Chroma band-pass filter ON/OFF	V1-V4**	0	Others**	0							
	12	TRAP	Y block chroma trap ON/OFF	0										
	13	LPF	YCbCr output low-pass filter ON/OFF	DRC*	0	VDO*	0							
	14	AFCG	H block PLL loop gain	V1-V4**	0	Others**	1							
	15	CDMD	V countdown system mode	V1-V4**	3	Others**	3							
	16	SSMD	Sync separation circuit	V1-V4**	0	Others**	0							
	17	HMSK	Macrovision signal masking ON/OFF	V1-V4**	1	Others**	0							
	18	HALI	H auto adjustment function	0										
	19	PPHA	Video and H TIM phase adjustment	V1-V4**	7	Others**	7							
	20	CBO1	Cb offset of Cb IN (pin 34) input	29										
	21	CRO1	Cr offset of Cr IN (pin 35) input	26										

♣	Adjustable - M Board CBA
♦	Adjustable - B Board CBA
♠	Adjustable - On Line (STD LIST)

♥	WV600 and WV700 are different

* DRC - Left picture of twin view is 480P, 720P, or 1080i input
* VDO - Left picture of twin view is 480i input

** Refers to the right picture of twin view

♣	Adjustable - M Board CBA
♦	Adjustable - B Board CBA
♠	Adjustable - On Line (STD LIST)

SERVICE DATA LISTS

CATEGORY	#	ITEM	DESCRIPTION	DATA									
CXA2170P-1	0	YOSW	Y Offset Switch	RF, V1-4	1	480i (V5, V6)	0	HD (V5,V6)	0	MS	0	V7	1
	1	TCOF		0									
				RF, V1-V4	V5-7 480i	V5/V6			V7				MS
						480P	720P	1080i	480P	VGA	720P	1080i	
	2	YOF	Y offset	0	15	7	7	7	0		0		7
	3	CBOF	Cb offset	44 ♠	44	44	47	44	40		41		34
	4	CROF	Cr offset	44 ♠	44	44	47	44	42		42		34
	5	SBRT	SUB brightness	Neutral Temp ♠	20	*SBRT is offset from adjust point (57WV700: +4, 65WV700: +6, 57WV600: +6, 65WV600: +4)							
	6	RDRV	R drive gain	Neutral Temp ♠	45								
	7	GDRV	G drive gain	Neutral Temp	30								
	8	BDRV	B drive gain	Neutral Temp ♠	34								
	9	RCUT	R cut-off	Neutral Temp ♠	41								
	10	GCUT	G cut-off	Neutral Temp	41								
	11	BCUT	B cut-off	Neutral Temp ♠	35								
	12	WBSW	White balance offset	Warm Temp	0	Cool Temp	0	Neutral Temp	0				
	13	SBOF	Sub brightness offset-ColorTemp.	Warm Temp	7	Cool Temp	7						
	14	RDOF	RDRV offset	Warm Temp	34	Cool Temp	34						
	15	GDOF	GDRV offset	Warm Temp	31	Cool Temp	31						
	16	BDOF	BDRV offset	Warm Temp	25	Cool Temp	34						
	17	RCOF	RCUT offset	Warm Temp	33	Cool Temp	32						
	18	GCOF	GCUT offset	Warm Temp	31	Cool Temp	31						
	19	BCOF	BCUT offset	Warm Temp	27	Cool Temp	45						
	20	DCOL	Dynamic Color for Cool	Cool Temp	2	Others	0						
CXA2170P-2	0	PICO	Picture+Ref.pulse on/off for G2 adj.	1									
	1	RGBS	RGB CRT ON/OFF combinations	7									
	2	BLKB	Bottom limiter level	0									
	3	RGBL	RGB limmiter level	2									
	4	YLMT	Y limiter level	2									
	5	AGNG	Black/White aging	0									
	6	AKBO	AKB on/off	0									
	7	CLPP	Clamp pulse phase	3									
	8	CLPG	Clamp gate on/off	0									
	9	CLPS	Clamp pulse start timing shift	0									
	10	PPAD	Picture Position	3									
	11	SYNP		0									
	12	HVBT		0									

* DRC - any 480i signal
* HD / VDO - any non-480i signal

♣	Adjustable - M Board CBA
♦	Adjustable - B Board CBA
♠	Adjustable - On Line (STD LIST)

SERVICE DATA LISTS

CATEGORY	#	ITEM	DESCRIPTION	DATA														
CXA2170P-3					RF		V5,V6				V7					MS	MS	
						V1-V4	480i	480P	1080i	720P	480i	480P	1080i	720P	VGA	Play	Menu	Twin
WV600 Data	0	SYSM	Selects the signal bandwidth [0:NTSC, 1:FF, 2:HD, 3:DTV]	Vivid	1	1	1	1	3	3	1	1	3	3	1	3	3	2
				Standard	1	1	1	1	3	3	1	1	3	3		3	3	2
				Movie	1	1	1	1	3	3	1	1	3	3		3	3	2
				Pro	1	2	1	1	3	3	1	1	3	3		3	3	2
	1	VMLV	VM output level	7														
	2	VMCR	VM output coring level	Vivid	1	1	1	1	0	0	1	1	0	0	0	0	3	1
				Standard	1	1	1	1	0	0	1	1	0	0		0	3	1
				Movie	1	1	1	1	0	0	1	1	0	0		0	3	1
				Pro	1	1	1	1	0	0	1	1	0	0		0	3	1
	3	VMLM	VM limiter level	Vivid	0	0	0	0	0	0	0	0	0	0	0	0	0	0
				Standard	0	0	0	0	0	0	0	0	0	0		0	0	0
				Movie	0	0	0	0	0	0	0	0	0	0		0	0	0
				Pro	0	0	0	0	0	0	0	0	0	0		0	0	0
	4	VMF0	VM output center frequency	Vivid	0 ♥ 2 ♥	0 ♥ 2 ♥	1 ♥ 2 ♥	1 ♥ 2 ♥	2	2	1 ♥ 2 ♥	1 ♥ 2 ♥	2	2	2	2	2	0 ♥ 2 ♥
				Standard	0 ♥ 2 ♥	0 ♥ 2 ♥	1 ♥ 2 ♥	1 ♥ 2 ♥	2	2	1 ♥ 2 ♥	1 ♥ 2 ♥	2	2		2	2	0 ♥ 2 ♥
				Movie	2	2	2	2	2	2	2	2	2	2		2	2	2
				Pro	2	0	2	2	2	2	2	2	2	2		2	2	2
	5	VMDL	VM output phase	Vivid	15 ♥ 8 ♥	15 ♥ 8 ♥	11 ♥ 8 ♥	11 ♥ 8 ♥	10	10	11 ♥ 8 ♥	11 ♥ 8 ♥	10	10	8	10	10	15 ♥ 8 ♥
				Standard	15 ♥ 8 ♥	15 ♥ 8 ♥	11 ♥ 8 ♥	11 ♥ 8 ♥	10	10	11 ♥ 8 ♥	11 ♥ 8 ♥	10	10		10	10	15 ♥ 8 ♥
				Movie	8	8	8	8	10	10	8	8	10	10		10	10	8
				Pro	8	15	8	8	10	10	8	8	10	10		10	10	8
	6	SHOF	Sharpness gain	Vivid	0 ● 2 ♥	1	2 ● 1 ♥	0	2 ● 3 ● 2 ♥	2 ● 3 ● 2 ♥	2 ● 1 ♥	0	2 ● 3 ● 2 ♥	2 ● 3 ● 2 ♥	0	2 ● 3 ● 2 ♥	0	0
				Standard	0 ♥ 2 ♥	1 ♥ 2 ♥	1 ♥ 2 ♥	1 ♥ 0 ♥	2	2	1 ♥ 2 ♥	1 ♥ 0 ♥	2	2		2	0	0
				Movie	1	1	1	1	1	1	1	1	1	1		1	0	1
				Pro	0	0	0	0	0	0	0	0	0	0		0	0	0
	7	SHF0	Sharpness center frequency	Vivid	1	1	1	1	1	1	1	1	1	1	1	1	1	1
				Standard	1	1	1	1	1	1	1	1	1	1		1	1	1
				Movie	1	1	1	1	1	1	1	1	1	1		1	1	1
				Pro	1	1	1	1	1	1	1	1	1	1		1	1	1
	8	PROV	Pre-shoot / Over-shoot ratio	Vivid	3	3	3	3	3	3	3	3	3	3	3	3	3	2
				Standard	3	3	3	3	3	3	3	3	3	3		3	3	2
				Movie	3	3	3	3	3	3	3	3	3	3		3	3	2
				Pro	3	3	3	3	3	3	3	3	3	3		3	3	2

♥	WV600 and WV700 are different
●	65WV600 and 57WV600 different

SERVICE DATA LISTS

							V5,V6				V7					MS	MS	
CATEGORY	#	ITEM	DESCRIPTION		RF	V1-V4	480i	480P	1080i	720P	480i	480P	1080i	720P	VGA	Play	Menu	Twin
CXA2170P-3	9	F1LV	Sharpness f1	Vivid	0	0	0	0	3	3	0	0	3	3	0	3	0	0
				Standard	0	0	0	0	3	3	0	0	3	3		3	0	0
				Movie	0	0	0	0	3	3	0	0	3	3		3	0	0
				Pro	0	0	0	0	3	3	0	0	3	3		3	0	0
	10	LTLV	LTI level	Vivid	3	3	3	3	3	3	3	3	3	3	0	3	3	3
				Standard	2	2	3	3	3	3	3	3	3	3		3	3	3
				Movie	1	1	1	1	1	1	1	1	1	1		1	1	1
				Pro	0	0	0	0	0	0	0	0	0	0		0	0	0
	11	LTMD	LTI mode [0:for B&W, 1:for Black]	Vivid	1	1	1	1	1	1	1	1	1	1	0	1	1	0
				Standard	1	1	1	1	1	1	1	1	1	1		1	1	0
				Movie	0	0	0	0	0	0	0	0	0	0		0	0	0
				Pro	1	1	1	1	1	1	1	1	1	1		1	1	0
	12	CTLV	CTI level [0:Off, 1:Low, 2:Mid, 3:High]	Vivid	0	0	0	0	0	0	0	0	0	0	0	0	0	0
				Standard	0	0	0	0	0	0	0	0	0	0		0	0	0
				Movie	0	0	0	0	0	0	0	0	0	0		0	0	0
				Pro	0	0	0	0	0	0	0	0	0	0		0	0	0
	13	UBOF	User brightness offset BRIGHT=BRIGHT+UBOF*2	Vivid	4	2 ♥ 3 ♥	4 ♥ 3 ♥	4	2	2	4 ♥ 3 ♥	4	2	2	3	2	2	4 ♥ 0 ♥
				Standard	1 ♥ 5 ♥	1 ♥ 0 ♥	2	3	4	4	2	3	4	4		4	4	7
				Movie	0	0	3	3	3	3	3	3	3	3		3	3	2
				Pro	0	0	3	3	3	3	3	3	3	3		3	3	4
	14	UCOF	User color offset COLOR=COLOR+UCOF*2	Vivid	3 ♥ 0 ♥	3 ♥ 1 ♥	3 ♥ 1 ♥	1	1 ● 2 ● 3 ♥	1 ● 2 ● 3 ♥	3 ♥ 1 ♥	1	1 ● 2 ● 3 ♥	1 ● 2 ● 3 ♥	0	1 ● 2 ● 3	1 ● 2 ● 3	1 ● 2 ● 0 ♥
				Standard	1 ♥ 0 ♥	2 ♥ 0 ♥	1	1 ♥ 0 ♥	0 ♥ 1 ♥	0 ♥ 1 ♥	1	1	0 ♥ 1 ♥	0 ♥ 1 ♥		0 ♥ 1 ♥	0 ♥ 1 ♥	0
				Movie	0	0	0	0	0	0	0	0	0	0		0	0	0
				Pro	0	0	0	0	0	0	0	0	0	0		0	0	0
	15	UHOF	User hue offset [0:HUE+0, 1:HUE+1 ,2:HUE+2, 3:HUE+3]	Vivid	2	0 ♥ 3 ♥	1 ♥ 3 ♥	0 ♥ 2 ♥	1 ♥ 2 ♥	1 ♥ 2 ♥	1 ♥ 3 ♥	0 ♥ 2 ♥	1 ♥ 2 ♥	1 ♥ 2 ♥	0	1 ♥ 2 ♥	1 ♥ 2 ♥	2
				Standard	1 ♥ 2 ♥	0 ♥ 3 ♥	1 ♥ 3 ♥	0 ♥ 2 ♥	1 ♥ 2 ♥	1 ♥ 2 ♥	1 ♥ 3 ♥	0 ♥ 2 ♥	1 ♥ 2 ♥	1 ♥ 2 ♥		1 ♥ 2 ♥	1 ♥ 2 ♥	0
				Movie	0	0	0	0	0	0	0	0	0	0		0	0	0
				Pro	0	0	0	0	0	0	0	0	0	0		0	0	0
	16	MIDE	MID Enhancement setting table	Vivid	7	12	17	22	27	32	17	22	27	32	1	27	27	57
				Standard	5	11	16	21	26	31	16	21	26	31		26	26	56
				Movie	3	10	15	24	25	30	15	24	25	30		25	25	55
				Pro	0	8	13	18	23	28	13	18	23	28		23	23	53
	17	VM	Initial VM [0:off, 1:Low, 2:Mid, 3:High]	Vivid	3	Standard	3	Movie	2	Pro	0							
	18	VM_H	VM high level assignment	Vivid	15	Standard	15	Movie	12	Pro	15							
	19	VM_M	VM mid level assignment	Vivid	10	Standard	10	Movie	8	Pro	10							
	20	VM_L	VM low level assignment	Vivid	5	Standard	5	Movie	4	Pro	5							
	21	VGAP		5														
	22	VGAS		0														
	23	VGAB		0														
	24	VGAC		0														
	25	VGAV		5														

♥	WV600 and WV700 are different
●	65WV600 and 57WV600 different

SERVICE DATA LISTS

CATEGORY	#	ITEM	DESCRIPTION	DATA							
CXA2170P-4	0	YCON	Y signal gain	MS	0	Others	1				
	1	SPIC	Sub picture	RF, V1-4, 480i(V5, V6)	14	HD* (V5,V6)	15	HD (V7)	15	MS	0
	2	SCOL	Sub color adjustment	RF, V1-4, 480i(V5, V6) ♦	34	HD* (V5,V6) ♦	36	HD (V7) ♦	34	MS ♦	31
	3	SHUE	Sub HUE adjustment	RF, V1-4, 480i(V5, V6) ♦	30	HD* (V5,V6) ♦	30	HD (V7) ♦	30	MS ♦	30
	4	SPIO	Sub picture offset	7 ♠							
	5	SCLO	Sub color offset	7 ♠							
	6	SHUO	Sub HUE offset	7 ♠							

*HD = 480P, 720P, 1080i

♣	Adjustable - M Board CBA
♦	Adjustable - B Board CBA
♠	Adjustable - On Line (STD LIST)
♥	WV600 and WV700 are different

#	ITEM	DESCRIPTION		♥ WV700	♥ WV600		♥ WV700	♥ WV600		♥ WV700	♥ WV600		
7	UPIC	User Picture gain	Vivid	63		Standard	50	47	Movie	20	18	Pro	31
8	UBRT	User Brightness	Vivid	28	19	Standard	36	31	Movie	34	31	Pro	31
9	UCOL	User Color	Vivid	33		Standard	31		Movie	33		Pro	31
10	UHUE	User Hue	Vivid	31		Standard	31		Movie	31		Pro	31
11	USHP	User Sharpness	Vivid	29	25	Standard	29		Movie	23		Pro	31
12	UTMP	User Color Temp [0:Low, 1:Mid, 2:High, 3:Inhibit]	Vivid	2		Standard	1		Movie	0		Pro	1

#	ITEM	DESCRIPTION	DATA
13	R-YR	R-Y/R	8
14	R-YB	R-Y/B	15
15	G-YR	G-Y/R	9
16	G-YB	G-Y/B	6

#	ITEM	DESCRIPTION		RF	V1-V4	V5,V6				V7					MS	MS	
						480i	480P	1080i	720P	480i	480P	1080i	720P	VGA	Play	Menu	Twin
17	GAMM	Initial Gamma [0:Weak, 3:Strong]	Vivid	3	3	3	3	3	3	3	3	3	3	0	3	3	3
			Standard	2	2	2	2	2	2	2	2	2	2		2	2	2
			Movie	1	1	1	1	1	1	1	1	1	1		1	1	1
			Pro	0	0	0	0	0	0	0	0	0	0		0	0	0

#	ITEM	DESCRIPTION				♥ WV700	♥ WV600		♥ WV700	♥ WV600		♥ WV700	♥ WV600
18	GAMS	GAM shape	GAMM = 0	0	GAMM =1	7		GAMM =2	7		GAMM =3	7	
19	GAMR	R output gamma	GAMM = 0	0	GAMM =1	6	4	GAMM =2	4	3	GAMM =3	9	7
20	GAMG	G output gamma	GAMM = 0	0	GAMM =1	6	4	GAMM =2	4	3	GAMM =3	9	7
21	GAMB	B output gamma	GAMM = 0	0	GAMM =1	6	4	GAMM =2	4	3	GAMM =3	9	7

#	ITEM	DESCRIPTION		RF	V1-V4	V5,V6				V7					MS	MS	
						480i	480P	1080i	720P	480i	480P	1080i	720P	VGA	Play	Menu	Twin
22	BLK	Initial black level	Vivid	3	3	3	3	3 ♥ 2 ♥	3 ♥ 2 ♥	3	3	3 ♥ 2 ♥	3 ♥ 2 ♥	0	3 ♥ 2 ♥	3 ♥ 2 ♥	1
			Standard	2	1	1	1	1	1	1	1	1	1		1	1	1
			Movie	0	0	0	0	0	0	0	0	0	0		0	0	0
			Pro	0	0	0	0	0	0	0	0	0	0		0	0	0

#	ITEM	DESCRIPTION				♥ WV700	♥ WV600				♥ WV700	♥ WV600
23	DCTR	DC tran ratio	BLK = 0	0	BLK = 1 ♥	5	10	BLK = 2	8	BLK = 3 ♥	8	15
24	APED	Auto pedestal level	BLK = 0	0	BLK = 1 ♥	1	2	BLK = 2	1	BLK = 3	3	
25	DSBO	Sub bright offset for UBLK [0:-7step, 15:+8st]	BLK = 0	7	BLK = 1	7		BLK = 2	7	BLK = 3	7	
26	IDSW	ID Switch	0									
27	ABLM	ABL mode	BLK = 0	0	BLK = 1	0		BLK = 2	1	BLK = 3	1	
28	ABLT	ABL threshold voltage	Single Picture	8	Others	8						
29	SPOF	Picture offset for Twin, Freeze, & Norm.	0									
30	DPSQ	Auto Pedestal black size inflection setting	BLK = 0	0	BLK = 1	0		BLK = 2	0	BLK = 3	0	
31	LRGB	Picture gain control for LRGB (OSD RGB)	0									

SERVICE DATA LISTS

CATEGORY	#	ITEM	DESCRIPTION	480P/960i				540P/1080i
				WideZoom	Zoom	Full (Fav,Scroll)	Normal	Full (Twin, MS)
CXA2170D-1	0	VPOS	Vertical Position	25 ♠				
	1	VSIZ	Vertical Size	31 ♠				
	2	VSZO	V Size offset (PJ only)	0				≈0
	3	VLIN	Vertical Linearity	5	5			
	4	VSCO	Vertical S-Correction	10	8			
	5	VCEN	Vertical Center	31				
	6	VPIN	Vertical Pin	15*			15	15*
	7	MVPN	Vertical Middle Pin	0				
	8	NSCO	Rotation	31				
	9	HTPZ	Horizontal Trapezoid	15				
	10	MHTZ	Middle Horizontal Trapezoid	0				
	11	ZOOM	Zoom Switch	1	1	0		
	12	APSW	Aspect Switch	1	1	1	1	0
	13	ASPT	Aspect Ratio	24	49	5	5	3
	14	SCRL	Vertical Scroll	29	29	29	29	29
	15	UVLN	Upper Vertical Linearity	4	0			
	16	LVLN	Lower Vertical Linearity	4	0			
CXA2170D-2	0	HCNT	Shading DC	19				
	1	HPOS	Horizontal Position	23				23
	2	HSIZ	Horizontal Size	31 ♠	31 ♠			
	3	SLIN	Blue Offset DC	9 ♠	9 ♠			
	4	MPIN	Blue Offset Para-Amp	0	0			
	5	PIN	Horizontal Pin	10	10			
	6	PINO	Pin Off-Set (PJ only)	7	7	7	7	7
	7	UCP	Upper Corner Pin	31	31			
	8	LCP	Lower Corner Pin	31	31			
	9	UXCG	Upper Extra Corner Pin Gain	0				
	10	LXCG	Lower Extra Corner Pin Gain	0				
	11	UXCP	Upper Extra Corner Pin Position	2				
	12	LXCP	Lower Extra Corner Pin Position	2				
	13	XCPP	Extra Corner Pin Polarity	0				
	14	PPHA	Pin Phase	31	31			
	15	VANG	AFC Angle	31				
	16	LANG	Shading Phase	31				
	17	VBOW	AFC Bow	31				
	18	LBOW	Shading Para Amp	48				

♣	Adjustable - M Board CBA
♦	Adjustable - B Board CBA
♠	Adjustable - On Line (STD LIST)

* This data resides in the same location in NVM.

SERVICE DATA LISTS

				480P/960i				540P/1080i	
CATEGORY	**#**	**ITEM**	**DESCRIPTION**	**WideZoom**	**Zoom**	**Full (Fav,Scroll)**	**Normal**	**Full (Twin, MS)**	
CXA2170D-3	0	HBLK	Horizontal Blanking Switch	1					
	1	LBLK	Left Blanking	56				56	
	2	RBLK	Right Blanking	25				25	
	3	VBLK	Vertical Blanking Switch	0	0	1*	1	1*	
	4	TBLK	Top Blanking	7	7	4	4	4	
	5	BBLK	Bottom Blanking	7	7	8	8	6	
	6	AFCM	AFC Loop Gain	3				3	
	7	JUMP	Reference Pulse Jump Switch	0*			0	0*	
	8	VDJP	Vertical Drive Jump Switch	1	1	1		1	
	9	VDST	Vertical Drive Start Switch	0				0	
	10	AKBT	AKB Timing	9	9	9		9	
CXA2170D-4	0	QPAM	DQP amplitude LEVEL	17			17	17*	
	1	QPAV	DQP amplitude VERTICAL MODULATION	31			31	31*	
	2	QPAP	DQP amplitude TILT	7			7	7*	
	3	QPDC	DQP DC level	20			20	20*	
	4	QPDV	DQP DC level VERTICAL MODULATION	60			60	60	
	5	QPDP	DQP DC level TILT	7			7	7*	
	6	CPY1	COPY FUNCTION (Full to Vcomp/normal)	0					
	7	DF	DF phase	31					
	8	DQP	DQP phase	31					
	9	DHMT	DH Board Mute	0					
CXA2170D-5	0	VFRQ	Vertical Frequency	1					
	1	VON	Vertical Drive On Switch	1					
	2	EWDC	Pin DC Level Shift	0					
	3	MS15	FH=15K @ MS Mode	0					
	4	HFRQ	Fh setting @multi-scan	80					
	5	HFRX	Reciprocal Fh @mult-scan	25					
	6	VMPS	Vertical Mult-scan Mode	0					
	7	INTR	Free-run Interlace Setting	0					
	8	VLNL	Vertical # of Lines (L)	0					
	9	VLNH	Vertical # of Lines (H)	0					
	10	AGCS	Vertical AGC Mode	0					
CXA2171	0	MTRX	Matrix	FRGB = 1	3	V5,V6,V7, no sync	1	Others	0
	1	GAIN	Output gain for Video	0					
	2	FIXS	SYNC type	V5/V6 (480p, 720p, 1080i, No Sync)	0	V7 (480p, VGA, 720p, 1080i, No Sync)	0	Others	0
	3	CBGN	Output gain for Cb	5 ♣					
	4	CRGN	Output gain for Cr	5 ♣					
	5	YGN	Output gain for Y	5 ♣					
	6	VTC	V SYNC sep. time constant	0					
	7	HTC	H SYNC sep. time constant	Tri-level sync	0	Others	1		
	8	HWID	H SYNC width	1					
	9	HSEP	SYNC sep. type	1					
	10	HMSK	H SYNC MASK during V SYNC period	1080i	0	Others	1		
	11	FRGB	Matrix=3:RGB	V5/V6 (480p, 720p, 1080i, No Sync)	0	V7 (480p, VGA, 720p, 1080i, No Sync)	0	Others	0

* This data resides in the same location in NVM.

♣	Adjustable - M Board CBA
♦	Adjustable - B Board CBA
♠	Adjustable - On Line (STD LIST)

SERVICE DATA LISTS

CATEGORY	#	ITEM	DESCRIPTION	DATA								
MID-1	0	DHPH	h active display area phase	H-resolution = 1920	106							
	1	DVPH	v active display area phase	H-resolution = 1920	20							
Common	2	DHAR	h active display area size	H-resolution = 1920	240							
picture	3	DVAR	v active display area size	H-resolution = 1920	135							
data	4	DHPW	display h pulse width	H-resolution = 1920	55							
	5	DVPW	display v pulse width	H-resolution = 1920	5							
	6	DYCD	display output yc signal delay correct	MID Mode = Single		Analog 480i	0	Analog Others	0			
				MID Mode = Twin	2							
				MID Mode = Memo	2							
NOTE:				MID Mode = Favorite	2							
All data listed				MID Mode = Scroll / Index	2							
data unless	7	DYSD	display output ys signal delay correct	Table 0	7	Table 1	4	Table 2	2	Table 3	1	Table = (2170P-3 SYSM) + (2170P-3 SHFO) - 1
	8	MDHP	main display picture h position	H-resolution = 1920		Widemode = Normal	160	Widemode = Others	0			
INITIALIZE:	9	MDVP	main display picture v position	Input = 480i / 480P / VGA		Widemode = Others	30					
Display twin				Input = Others	0							
mode with one	10	MDHS	main display picture h size	H-resolution = 1920		Widemode = Normal	163	Widemode = Others	240			
the other.	11	MDVS	main display picture v size	Input = 480i	120			Widemode = Others	120			
Enter service.				Input = Others	135							
"7" + "JUMP"	12	MLHP	multi picture mode h position	MID Mode = Twin / Memo	43	MID Mode = Favorite	35	MID Mode = Scroll / Index	40			
+ "ENTER"	13	MLVP	multi picture mode v position	MID Mode = Twin / Memo	9	MID Mode = Favorite	30	MID Mode = Scroll / Index	29			
Wait until pics	14	SDHP	sub display picture h position	MID Mode = Favorite	167							
become same	15	SDVP	sub display picture v position	MID Mode = Favorite	6							
size. WRITE.	16	SDHS	sub display picture h size	MID Mode = Favorite	115							
	17	SDVS	sub display picture v size	MID Mode = Favorite	75							
	18	PDHP	PinP Large mode h position	0								
	19	PDVP	PinP Large mode v position	0								
	20	PDHS	PinP Large mode h size	0								
	21	PDVS	PinP Large mode v size	0								
	22	DPSW	display pll switch	MID Mode = Single, Input = 1080i	0	Others	0					
	23	MDLO	model select	12	MDLO Details ↓		0 ↓	1 ↓				
					Bit7	Not Used						
					Bit6	Not Used						
					Bit5	Scroll Sub-Picture (16:9 only)	4:3 Display	16:9 Display				
					Bit4	Memory-PLL Fregeuncy	18.54…MHz	17.26…MHz				
					Bit3	ADC-PLL Select	Internal	External				
					Bit2	Frame On/Off (Twin)	Off	On				
					Bit1	Display Type (Scroll)	16:9 Model	4:3 Model				
					Bit0	Display Type (Twin, Memo)	16:9 Model	4:3 Model				
	24	BCOL	Background color y	MID Mode = Single		Widemode = Normal	5	Widemode = Others	5			
			[0 = Black, 15 = White]	MID Mode = MS	5							
				MID Mode = Others	5							
	25	DYSS	display output ys signal type select	MID Mode = MS	3							
	26	OSDH	Index Sub-Picture OSD H position	MID Mode = Scroll / Index	32							
	27	OSDV	Index Sub-Picture OSD V position	MID Mode = Scroll / Index	16							

SERVICE DATA LISTS

MID MODE SINGLE PICTURE	SERVICE DATA				
RF, V1-4 Full (Other) MID2	MID2	0	DRHP	H Pos	117
	MID2	1	DRHS	H Size	178
	MID2	2	DRVP	V Pos	36
	MID2	3	DRVS	V Size	120
RF, V1-4 Normal MID2	MID2	0	DRHP	H Pos	154
	MID2	1	DRHS	H Size	162
	MID2	2	DRVP	V Pos	37
	MID2	3	DRVS	V Size	120
480i, V5-7 Full (Other) MID2	MID2	0	DRHP	H Pos	118
	MID2	1	DRHS	H Size	177
	MID2	2	DRVP	V Pos	37
	MID2	3	DRVS	V Size	120
480i, V5-7 Normal MID2	MID2	0	DRHP	H Pos	154
	MID2	1	DRHS	H Size	161
	MID2	2	DRVP	V Pos	33
	MID2	3	DRVS	V Size	122
480P Full (Other) MID3	MID3	0	VDHP	H Pos	147
	MID3	1	VDHS	H Size	240
	MID3	2	VDVE	V Pos	37
	MID3	3	VDVS	V Size	120
480P Normal MID3	MID3	0	VDHP	H Pos	201
	MID3	1	VDHS	H Size	216
	MID3	2	VDVE	V Pos	44
	MID3	3	VDVS	V Size	116
720P MID3	MID3	0	VDHP	H Pos	139
	MID3	1	VDHS	H Size	158
	MID3	2	VDVE	V Pos	25
	MID3	3	VDVS	V Size	179

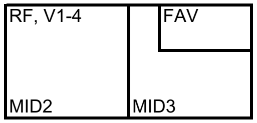
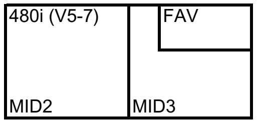
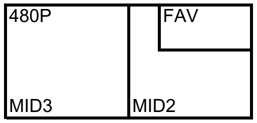
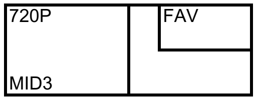
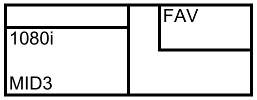
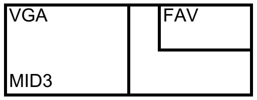
MID MODE SINGLE PICTURE	SERVICE DATA				
1080i MID3	MID3	0	VDHP	H Pos	100
	MID3	1	VDHS	H Size	240
	MID3	2	VDVE	V Pos	18
	MID3	3	VDVS	V Size	135
VGA Full (Other) MID3	MID3	0	VDHP	H Pos	167
	MID3	1	VDHS	H Size	228
	MID3	2	VDVE	V Pos	36
	MID3	3	VDVS	V Size	119
VGA Normal MID3	MID3	0	VDHP	H Pos	213
	MID3	1	VDHS	H Size	207
	MID3	2	VDVE	V Pos	38
	MID3	3	VDVS	V Size	118

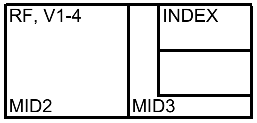
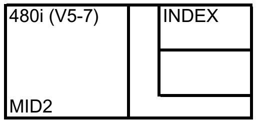
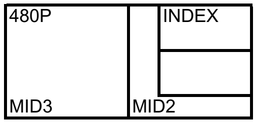
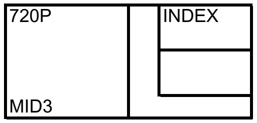
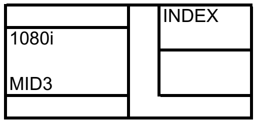
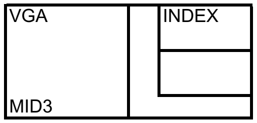
SERVICE DATA LISTS

MID MODE TWIN PICTURE	SERVICE DATA				
RF, V1-4 RF, V1-4 MID2 MID3	MID2	0	DRHP	H Pos	145
	MID2	1	DRHS	H Size	165
	MID2	2	DRVP	V Pos	58
	MID2	3	DRVS	V Size	110
	MID3	0	VDHP	H Pos	74
	MID3	1	VDHS	H Size	165
	MID3	2	VDVE	V Pos	25
	MID3	3	VDVS	V Size	56
480i (V5-7) MID2	MID2	0	DRHP	H Pos	144
	MID2	1	DRHS	H Size	164
	MID2	2	DRVP	V Pos	44
	MID2	3	DRVS	V Size	117
480P RF, V1-4 MID3 MID2	MID2	0	DRHP	H Pos	153
	MID2	1	DRHS	H Size	165
	MID2	2	DRVP	V Pos	58
	MID2	3	DRVS	V Size	110
	MID3	0	VDHP	H Pos	188
	MID3	1	VDHS	H Size	220
	MID3	2	VDVE	V Pos	60
	MID3	3	VDVS	V Size	108
720P MID3	MID3	0	VDHP	H Pos	160
	MID3	1	VDHS	H Size	148
	MID3	2	VDVE	V Pos	55
	MID3	3	VDVS	V Size	165
1080i MID3	MID3	0	VDHP	H Pos	141
	MID3	1	VDHS	H Size	221
	MID3	2	VDVE	V Pos	41
	MID3	3	VDVS	V Size	124
VGA MID3	MID3	0	VDHP	H Pos	198
	MID3	1	VDHS	H Size	213
	MID3	2	VDVE	V Pos	54
	MID3	3	VDVS	V Size	111

MID MODE FREEZE	SERVICE DATA				
RF, V1-4 FREEZE MID2	MID2	0	DRHP	H Pos	146
	MID2	1	DRHS	H Size	164
	MID2	2	DRVP	V Pos	58
	MID2	3	DRVS	V Size	110
480i (V5-7) FREEZE MID2	MID2	0	DRHP	H Pos	145
	MID2	1	DRHS	H Size	163
	MID2	2	DRVP	V Pos	44
	MID2	3	DRVS	V Size	117
480P FREEZE MID3	MID3	0	VDHP	H Pos	188
	MID3	1	VDHS	H Size	219
	MID3	2	VDVE	V Pos	62
	MID3	3	VDVS	V Size	107
720P FREEZE MID3	MID3	0	VDHP	H Pos	161
	MID3	1	VDHS	H Size	147
	MID3	2	VDVE	V Pos	54
	MID3	3	VDVS	V Size	165
1080i FREEZE MID3	MID3	0	VDHP	H Pos	142
	MID3	1	VDHS	H Size	220
	MID3	2	VDVE	V Pos	43
	MID3	3	VDVS	V Size	123
VGA FREEZE MID3	MID3	0	VDHP	H Pos	204
	MID3	1	VDHS	H Size	210
	MID3	2	VDVE	V Pos	60
	MID3	3	VDVS	V Size	108

SERVICE DATA LISTS

MID MODE FAVORITE CHANNEL	SERVICE DATA				
 RF, V1-4 FAV MID2 MID3	MID2	0	DRHP	H Pos	146
	MID2	1	DRHS	H Size	165
	MID2	2	DRVP	V Pos	37
	MID2	3	DRVS	V Size	120
	MID3	0	VDHP	H Pos	76
	MID3	1	VDHS	H Size	169
	MID3	2	VDVE	V Pos	20
	MID3	3	VDVS	V Size	57
 480i (V5-7) FAV MID2 MID3	MID2	0	DRHP	H Pos	145
	MID2	1	DRHS	H Size	163
	MID2	2	DRVP	V Pos	22
	MID2	3	DRVS	V Size	128
	MID3	0	VDHP	H Pos	76
	MID3	1	VDHS	H Size	172
	MID3	2	VDVE	V Pos	20
	MID3	3	VDVS	V Size	57
 480P FAV MID3 MID2	MID2	0	DRHP	H Pos	154
	MID2	1	DRHS	H Size	172
	MID2	2	DRVP	V Pos	39
	MID2	3	DRVS	V Size	115
	MID3	0	VDHP	H Pos	187
	MID3	1	VDHS	H Size	219
	MID3	2	VDVE	V Pos	37
	MID3	3	VDVS	V Size	120
 720P FAV MID3	MID3	0	VDHP	H Pos	157
	MID3	1	VDHS	H Size	148
	MID3	2	VDVE	V Pos	60
	MID3	3	VDVS	V Size	162
 FAV 1080i MID3	MID3	0	VDHP	H Pos	134
	MID3	1	VDHS	H Size	222
	MID3	2	VDVE	V Pos	45
	MID3	3	VDVS	V Size	122
 VGA FAV MID3	MID3	0	VDHP	H Pos	200
	MID3	1	VDHS	H Size	211
	MID3	2	VDVE	V Pos	39
	MID3	3	VDVS	V Size	118

MID MODE CHANNEL INDEX	SERVICE DATA				
 RF, V1-4 INDEX MID2 MID3	MID2	0	DRHP	H Pos	146
	MID2	1	DRHS	H Size	164
	MID2	2	DRVP	V Pos	36
	MID2	3	DRVS	V Size	120
	MID3	0	VDHP	H Pos	71
	MID3	1	VDHS	H Size	167
	MID3	2	VDVE	V Pos	24
	MID3	3	VDVS	V Size	57
 480i (V5-7) INDEX MID2	MID2	0	DRHP	H Pos	145
	MID2	1	DRHS	H Size	163
	MID2	2	DRVP	V Pos	21
	MID2	3	DRVS	V Size	128
 480P INDEX MID3 MID2	MID2	0	DRHP	H Pos	144
	MID2	1	DRHS	H Size	167
	MID2	2	DRVP	V Pos	50
	MID2	3	DRVS	V Size	114
	MID3	0	VDHP	H Pos	185
	MID3	1	VDHS	H Size	220
	MID3	2	VDVE	V Pos	44
	MID3	3	VDVS	V Size	116
 720P INDEX MID3	MID3	0	VDHP	H Pos	160
	MID3	1	VDHS	H Size	147
	MID3	2	VDVE	V Pos	61
	MID3	3	VDVS	V Size	162
 INDEX 1080i MID3	MID3	0	VDHP	H Pos	138
	MID3	1	VDHS	H Size	221
	MID3	2	VDVE	V Pos	45
	MID3	3	VDVS	V Size	122
 VGA INDEX MID3	MID3	0	VDHP	H Pos	200
	MID3	1	VDHS	H Size	211
	MID3	2	VDVE	V Pos	38
	MID3	3	VDVS	V Size	118

SERVICE DATA LISTS

CATEGORY	#	ITEM	DESCRIPTION	Register	Approx NVM addr	MID Mode		DATA									
MID-3																	
	4	VDVO	VDO input V active area line size	vdo_vactv_odd	A8 00 80	1080i	0	720p	0	480p	0	VGA	0				
	5	VCPO	VDO input V active area odd position			1080i	72	720p	88	480p	122	VGA	122				
VDO input	6	VCWD	VDO input clamp pulse output timing			1080i	3	720p	3	480p	3	VGA	3				
data	7	VYCD	VDO input clamp pulse width			1080i	0	720p	0	480p	0	VGA	0				
	8	VSTP	VDO input PLL phase detect stop line count			1080i	137	720p	183	480p	129	VGA	129				
	9	VSTT	VDO input PLL phase detect start line cnt			1080i	0	720p	0	480p	0	VGA	0				
	10	VHSC	VDO input H sync cycle			YC, all 480 inputs	130										
	11	VFRV	vdo_fld_rev			YC	0	480i	0	1080i	0	720p	0	480p	0	VGA	0

CATEGORY	#	ITEM	DESCRIPTION			DATA 🟩 ♥ WV600 and WV700 are different												
MID-5						POP Table Select (Based on 2170:MIDE setting)												
						0	1	2	3	4	5	6	7	8	9	10	11	12
	1	MHLY	m_hlpf_ycoef		WV600 ♥ WV700 ♥	1 2	2	1	2	1	1 2	1	1 2	1	3	1	1	1
	2	MHLC	m_hlpf_ccoef			3	0	3	3	3	3	3	3	3	3	3	3	3
	3	MVLY	m_vlpf_ycoef			0	0	0	0	0	0	0	0	0	1	0	0	0
	4	MVLC	m_vlpf_ccoef			0	0	0	0	0	0	0	0	0	1	0	0	0
	5	MHYR	m_henh_ycore		WV600 ♥ WV700 ♥	0	0	1	0	2	3	3	3	0	0	0	1 2	1 2
	6	MHYL	m_henh_yclip		WV600 ♥ WV700 ♥	0	0	1	0	1	1 2	2	1 2	0	0	0	1 2	1 2
TO INITIALIZE:	7	MHYE	m_henh_yenh		WV600 ♥ WV700 ♥	0	0	5	0	6	0 7	7	0 7	0	0	0	7 4	7
	8	MHYO	m_henh_ycof			1	0	1	1	1	1	1	1	1	0	1	1	1
Display twin	9	MHCR	m_henh_ccore			0	0	0	0	0	0	0	0	0	0	0	0	0
mode with one	10	MHCL	m_henh_cclip			0	0	0	0	0	0	0	0	0	0	0	0	0
	11	MHCE	m_henh_cenh			0	0	0	0	0	0	0	0	0	0	0	0	0
side larger than	12	MHCO	m_henh_ccof			1	0	0	1	0	0	0	0	0	0	0	0	0
the other. Enter service.	13	MVYR	m_venh_ycore		WV600 ♥ WV700 ♥	0	0	0	0	1	2	2	3 2	0	0	0	1 2	1 3
"7" + "JUMP"	14	MVYL	m_venh_yclip			0	0	0	0	1	1	1	1	0	0	0	1	1
+ "ENTER" Wait until pics	15	MVYE	m_venh_yenh		WV600 ♥ WV700 ♥	0	0	0	0	1	5 3	3	5 3	0	0	0	5 3	5 3
become same	16	MVCR	m_venh_ccore			0	0	0	0	0	0	0	0	0	0	0	0	0
size. WRITE.	17	MVCL	m_venh_cclip			0	0	0	0	0	0	0	0	0	0	0	0	0
	18	MVCE	m_venh_cenh			0	0	0	0	0	0	0	0	0	0	0	0	0

SERVICE DATA LISTS

CATEGORY	#	ITEM	DESCRIPTION			DATA	🟩 ♥ WV600 and WV700 are different											
MID-5						POP Table Select (Based on 2170:MIDE setting)												
						13	14	15	16	17	18	19	20	21	22	23	24	25
	1	MHLY	m_hlpf_ycoef			2	3	2	2	2	1	3	1	1	1	0	1	0
	2	MHLC	m_hlpf_ccoef			3	3	3	3	3	3	3	3	3	3	2	3	2
	3	MVLY	m_vlpf_ycoef			0	1	0	0	0	0	1	0	0	0	0	0	0
TO	4	MVLC	m_vlpf_ccoef			0	1	0	0	0	0	1	0	0	0	0	0	0
INITIALIZE:	5	MHYR	m_henh_ycore		WV600 ♥ WV700 ♥	0	0	0	1	1 3	0	0	1	1 2	3	0	0	0
Display twin mode with one	6	MHYL	m_henh_yclip		WV600 ♥ WV700 ♥	0	0	0	2	1	0	0	1	1 2	1	0	0	0
side larger than	7	MHYE	m_henh_yenh		WV600 ♥ WV700 ♥	0	0	0	7 2	7	0	0	7	4 0	0 4	0	0	0
the other.						0	0	0	1	1	1	0	1	1	1	1	1	1
Enter service.	9	MHCR	m_henh_ccore			0	0	0	2	2	0	0	0	0	2	0	0	0
"7" + "JUMP"	10	MHCL	m_henh_cclip			0	0	0	0	0	0	0	0	0	0	0	0	0
+ "ENTER"	11	MHCE	m_henh_cenh			0	0	0	0	0	0	0	0	0	0	0	0	0
Wait until pics	12	MHCO	m_henh_ccof			0	0	0	1	1	1	0	0	1	1	1	1	1
become same size. WRITE.	13	MVYR	m_venh_ycore		WV600 ♥ WV700 ♥	0	0	0	1	1	0	0	0	1 2	1 2	0	0	0
	14	MVYL	m_venh_yclip			0	0	0	1	1	0	0	1	1	1	0	0	0
	15	MVYE	m_venh_yenh		WV600 ♥ WV700 ♥	0	0	0	5 3	7 5	0	0	3	5 3	7 5	0	0	0
	16	MVCR	m_venh_ccore	m_venh_ccore		0	0	0	2	2	0	0	0	0	2	0	0	0
	17	MVCL	m_venh_cclip	m_venh_cclip		0	0	0	0	0	0	0	0	0	0	0	0	0
	18	MVCE	m_venh_cenh	m_venh_cenh		0	0	0	0	0	0	0	0	0	0	0	0	0
						POP Table Select												
						26	27	28	29	30	31	32	33	34	35	36	37	38
	1	MHLY	m_hlpf_ycoef			0	0	0	3	0	0	0	1	3	1	1	1	1
	2	MHLC	m_hlpf_ccoef			2	2	0	3	0	0	0	3	3	3	3	3	3
	3	MVLY	m_vlpf_ycoef			0	0	0	1	0	0	0	0	1	0	0	0	0
	4	MVLC	m_vlpf_ccoef			0	0	0	1	0	0	0	0	1	0	0	0	0
NOTE:	5	MHYR	m_henh_ycore			2	2	0	0	0	1	3	0	0	1	1	1	1
All data listed	6	MHYL	m_henh_yclip			1	1	0	0	0	1	1	0	0	1	2	2	1
here is INITIAL	7	MHYE	m_henh_yenh			5	5	0	0	4	7	4	0	0	2	2	7	7
data unless	8	MHYO	m_henh_ycof			1	1	1	0	1	1	1	1	0	1	1	1	1
marked by *.	9	MHCR	m_henh_ccore			2	3	0	0	0	1	3	0	0	0	0	0	0
	10	MHCL	m_henh_cclip			2	2	0	0	0	2	2	0	0	0	0	0	0
	11	MHCE	m_henh_cenh			2	2	0	0	0	2	2	0	0	0	0	0	0
	12	MHCO	m_henh_ccof			1	1	1	0	1	1	1	0	0	0	0	0	0
	13	MVYR	m_venh_ycore			2	2	0	0	0	1	3	0	0	1	1	2	0
	14	MVYL	m_venh_yclip			1	1	0	0	0	1	1	0	0	1	1	1	0
	15	MVYE	m_venh_yenh			3	7	0	0	0	4	3	0	0	5	7	5	0
	16	MVCR	m_venh_ccore			2	3	0	0	0	1	3	0	0	0	0	0	0
	17	MVCL	m_venh_cclip			1	1	0	0	0	1	1	0	0	0	0	0	0
	18	MVCE	m_venh_cenh			2	3	0	0	0	4	3	0	0	0	0	0	0

SERVICE DATA LISTS

CATEGORY	#	ITEM	DESCRIPTION			DATA												
MID-5						POP Table Select												
						39	40	41	42	43	44	45	46	47	48	49	50	51
NOTE:	1	MHLY	m_hlpf_ycoef			3	1	1	1	0	3	0	0	0	0	0	0	0
All data listed	2	MHLC	m_hlpf_ccoef			3	3	3	3	0	3	0	0	0	0	0	0	0
here is INITIAL	3	MVLY	m_vlpf_ycoef			1	0	0	0	0	1	0	0	0	0	0	0	0
data unless	4	MVLC	m_vlpf_ccoef			1	0	0	0	0	1	0	0	0	0	0	0	0
marked by *.	5	MHYR	m_henh_ycore			0	1	1	1	0	0	0	0	0	0	0	0	0
	6	MHYL	m_henh_yclip			0	1	2	2	1	0	1	1	1	1	1	1	1
TO	7	MHYE	m_henh_yenh			0	3	2	7	2	0	4	7	7	2	2	4	7
INITIALIZE:	8	MHYO	m_henh_ycof			0	1	1	1	0	0	0	0	0	0	0	0	0
Display twin	9	MHCR	m_henh_ccore			0	0	0	0	0	0	0	1	1	0	0	0	1
mode with one	10	MHCL	m_henh_cclip			0	0	0	0	0	0	0	1	1	0	0	0	1
side larger than	11	MHCE	m_henh_cenh			0	0	0	0	0	0	0	4	4	0	0	0	4
the other.	12	MHCO	m_henh_ccof			0	0	0	0	0	0	0	1	1	0	0	0	1
Enter service.	13	MVYR	m_venh_ycore			0	1	1	1	0	0	0	0	0	0	0	0	0
"7" + "JUMP"	14	MVYL	m_venh_yclip			0	1	1	1	0	0	1	1	1	0	0	1	1
+ "ENTER"	15	MVYE	m_venh_yenh			0	4	7	5	0	0	4	4	4	0	0	4	4
Wait until pics	16	MVCR	m_venh_ccore			0	0	0	0	0	0	0	1	1	0	0	0	1
become same	17	MVCL	m_venh_cclip			0	0	0	0	0	0	0	1	1	0	0	0	1
size. WRITE.	18	MVCE	m_venh_cenh			0	0	0	0	0	0	0	4	4	0	0	0	4

SERVICE DATA LISTS

CATEGORY	#	ITEM	DESCRIPTION			DATA												
MID-5						POP Table Select												
						52	53	54	55	56	57	58	59	60	61	62	63	64
	1	MHLY	m_hlpf_ycoef			0	0	0	0	0	0	0	0	0	0	0	0	0
	2	MHLC	m_hlpf_ccoef			0	0	0	0	0	0	0	0	0	0	0	0	0
	3	MVLY	m_vlpf_ycoef			0	0	0	0	0	0	0	0	0	0	0	0	0
NOTE:	4	MVLC	m_vlpf_ccoef			0	0	0	0	0	0	0	0	0	0	0	0	0
All MID data	5	MHYR	m_henh_ycore			0	0	0	0	0	0	0	0	0	0	0	0	0
here is INITIAL	6	MHYL	m_henh_yclip			1	0	0	0	0	0	0	0	0	0	0	0	0
data unless	7	MHYE	m_henh_yenh			7	0	0	0	0	0	0	0	0	0	0	0	0
marked by *.	8	MHYO	m_henh_ycof			0	0	0	0	0	0	0	0	0	0	0	0	0
	9	MHCR	m_henh_ccore			1	0	0	0	0	0	0	0	0	0	0	0	0
	10	MHCL	m_henh_cclip			1	0	0	0	0	0	0	0	0	0	0	0	0
	11	MHCE	m_henh_cenh			4	0	0	0	0	0	0	0	0	0	0	0	0
	12	MHCO	m_henh_ccof			1	0	0	0	0	0	0	0	0	0	0	0	0
	13	MVYR	m_venh_ycore			0	0	0	0	0	0	0	0	0	0	0	0	0
	14	MVYL	m_venh_yclip			1	0	0	0	0	0	0	0	0	0	0	0	0
	15	MVYE	m_venh_yenh			4	0	0	0	0	0	0	0	0	0	0	0	0
	16	MVCR	m_venh_ccore			1	0	0	0	0	0	0	0	0	0	0	0	0
	17	MVCL	m_venh_cclip			1	0	0	0	0	0	0	0	0	0	0	0	0
	18	MVCE	m_venh_cenh			4	0	0	0	0	0	0	0	0	0	0	0	0
						MS												
	19	SHLY	s_hlpf_ycoef			0												
	20	SHLC	s_hlpf_ccoef			0												
	21	SVLY	s_vlpf_ycoef			0												
	22	SVLC	s_vlpf_ccoef			0												
	23	SHYR	s_henh_ycore			0												
	24	SHYL	s_henh_yclip			0												
	25	SHYE	s_henh_yenh			0												
	26	SHYO	s_henh_ycof			0												
	27	SHCR	s_henh_ccore			0												
	28	SHCL	s_henh_cclip			0												
	29	SHCE	s_henh_cenh			0												
	30	SHCO	s_henh_ccof			0												
	31	SVYR	s_venh_ycore			0												
	32	SVYL	s_venh_yclip			0												
	33	SVYE	s_venh_yenh			0												
	34	SVCR	s_venh_ccore			0												
	35	SVCL	s_venh_cclip			0												
	36	SVCE	s_venh_cenh			0												
CXA3506R				480i,YC	Others													
	0	MCON	Main Contrast	64	64 ♦													
	1	SCOR	Sub Contrast Red	128	128 ♦													
	2	SCOG	Sub Contrast Green	128	128													
	3	SCOB	Sub Contrast Blue	128	128 ♦													
	4	RGB	RGB Out	0	0													

♣	Adjustable - M Board CBA
♦	Adjustable - B Board CBA
♠	Adjustable - On Line (STD LIST)

SERVICE DATA LISTS

♥ WV600 and WV700 are different

CATEGORY	#	ITEM	DESCRIPTION	DATA			
AUDIO	0	ASYS	Stereo System 0:BiAmp, 1:3D	57":	0	65":	0
	1	TRCV	Fc= 0: 3KHz, 1: 5KHz, 2: 7KHz	57":	0	65":	0
	2	BACV	Fc= 0:80Hz, 1: 160Hz, 2: 240Hz	57":	1	65":	2
	3	MDCV	Fc= 0: 500Hz, 1: 1KHz, 2: 2KHz	57":	1	65":	1
	4	SVHI	Sub Vol Hi Freq (1db/step, 0:-7dB, 7:0dB)	57":	5	65":	5
	5	SVLO	Sub Volume Low Freq	57":	6	65":	6
	6	MIDL	Mid Cut Off	57":	9	65":	9
	7	LOFQ	Woofer Cut Off	57":	4	65":	4
	8	SBAS	Sub Bass	57":	9	65":	9
	9	BSFQ	Bass Cut Off	57":	7	65":	7
	10	STRE	Sub Treble	57":	4	65":	5
	11	TRFQ	Treble Cut Off	57":	7	65":	7
	12	PSEF	Pseudo Stereo Effect	57":	5	65":	5
	13	AGCL	AGC Level (0:500mV)	57":	0	65":	0

CATEGORY	#	ITEM	DESCRIPTION	57" Surround OFF		57" Trusurround	57" Simulated	65" Surround OFF		65" Trusurround	65" Simulated
				Stdy Snd AUTO	Stdy Snd OFF	-	-	Stdy Snd AUTO	Stdy Snd OFF	-	-
AUDIO	14	BBE	BBE Switch [1: On , 0: Off]	1	1	1	1	1	1	1	1
	15	BBEP	BBE1 High	2	2	3	2	2	2	3	2
	16	BBEL	BBE1 Low	1	1	1	1	2	2	3	2
	17	BB2P	BBE2 High	0	0	0	0	0	0	0	0
	18	BB2L	BBE2 Low	0	0	0	0	0	0	0	0

CATEGORY	#	ITEM	DESCRIPTION	DATA			
AUDIO	19	TRS1	TruSurround Center	57":	4	65":	4
	20	TRS2	TruSurround Space	57":	5	65":	5

CATEGORY	#	ITEM	DESCRIPTION		SNNR=0	SNNR=1	SNNR=2	SNNR=3	SNNR=4	SNNR=5	SNNR=6	SNNR=7
SNNR	0	MODE	SNNR Mode (0: Auto: 1: SNNR, 2: OFF)	0								
	1	SNNR	Noise Reduction Level Setting	0								
	2	WSLT	WSL Noise Limit Threshold		0	15	31	45	63	85	127	180
RF Noise Reduction	3	CPFG	3DCOMB:YPFG = YPFG – CPFG		0	0	1	0	1	1	2	2
	4	CPFT	3DCOMB:YPFT = YPFT – CPFT		0	0	2	0	2	3	3	3
	5	CCOR	3DCOMB:YHCO = CCOR	WV600 ♥	0	2	2	2	2	3	3	3
				WV700 ♥		0	1	1	2	2		
	6	CHCG	3DCOMB:YHCG = CHCG		0	1	1	1	1	1	1	1
	7	CAPG	3DCOMG:VAPG = YAPG – CAPG		0	0	0	0	0	0	0	0
	8	3SHP	2103-1:SHAP = USHP – 3SHP	WV600 ♥	0	2	3	5	6	7	8	10
				WV700 ♥		0	0	0	0	0	0	1
	9	NYNR	3DNR:YLV = YLV + NYNR		0	1	1	1	2	2	2	2
	10	NCNR	3DNR:CLV = CLV + NCNR		0	1	1	1	2	2	2	2
	11	NYMG	3DNR:YMG = YMG – NYMG		0	0	0	0	0	0	0	0
	12	NCMG	3DNR:CMG = CMG - NCMG		0	0	0	0	0	0	0	0
	13	NYLT	3DNR:YLT = YLT – NYLT		0	1	1	0	3	4	6	8
	14	NYNC	3DNR:YNC = YNC – NYNC		1	1	1	1	2	2	2	2
	15	NYCO	3DNR:YCO = YCO – NYCO		0	0	0	0	0	0	0	0
	16	7SHP	2170-P4:USHP = USHP – (7SHP x 4)		0	0	0	0	0	1	1	1
	17	7YF1	2170-P3:F1LV = F1LV – 7YF1		0	0	1	0	2	2	2	3
	18	7LTI	2170-P3:LTLV = LTLV – 7LTI		0	0	0	0	0	0	0	0
	19	7CTI	2170-P3:CTIL = CTIL – 7CTI		0	0	0	0	0	0	0	0
	20	7VML	2170-P3:VM_LEV = VM_LEV – 7VML		0	0	0	0	0	0	0	0
	21	7VMC	2170-P3:VMCR = VMCR + 7VMCR		0	1	1	0	2	2	2	2
	22	MIDD	MIDE = MIDE - MIDD		0	0	0	0	0	0	0	0

SERVICE DATA LISTS

CATEGORY	#	ITEM	DESCRIPTION	DATA
CCD	0	HPRM	CCD/V-CHIP(Main) OSD H position	60 ♠
	1	HPRS	CCD/V-CHIP(Sub) OSD H position	60 ♠
	2	YSYM	Caption Background select(Main&Sub)	0
CC and V Chip	3	CCDI	Interuption count(Main&Sub)	3
	4	CRIP	CRI count & Parity count	4
	5	PHLD	Peak hold for Data slice(Main&Sub)	0
	6	CHMK	H Mask width(Main&Sub)	52
	7	LANG	V-Chip Disp. Language	2
	8	DATA	Slice data OSD on/off	0
	9	VCHP	V-CHIP Blocking function on/off	0
	10	CLMP	Clamp voltage for V-IN	0
	11	SYSV	SYNC slice voltage for V-IN	4
	12	ID1	ID-1 ON/OFF	1
	13	ID1M	ID-1 Mode	1
	14	FPOL	Field polarlity	0
	15	BWHT	Banner white level	0
	16	MESH	Banner back ground type	0
	17	BNBB	Banner back ground color-Blue	1
	18	BNBG	Banner back groung color-Green	1
	19	BNBR	Banner back ground color-Red	0
	20	CMP1	Banner back ground level1 comp	2
	21	CMP2	Banner back ground level2 comp	5
	22	CMP3	Banner back ground level3 comp	3
	23	CWHT	Caption white level	3
	24	VSDW	V sync detection width	1
	25	BFRQ	XDS banner display PLL frequency	0
	26	BPOS		0
	27	BFRM		1
	28	BTIM		0

♣	Adjustable - M Board CBA
♦	Adjustable - B Board CBA
♠	Adjustable - On Line (STD LIST)

SERVICE DATA LISTS

CATEGORY	#	ITEM	DESCRIPTION	DATA				
3DNR	0	WHCT	PLL Divider setting	44				
(TC90A90F)	1	NIQM	U/V input polarity	1				
	2	CLPW	A/D Clamp Pulse width	30				
	3	CLPP	A/D Clamp Pulse Phase	80				
3D Noise	4	YHBW	Y H Blanking width	138				
Reduction	5	YBKL	Y Blanking level adjustment	0				
	6	YBKO	Internal Y H Blanking ON/OFF	0				
	7	MUTE	Signal Output Muting	0				
	8	YHBS	Y H Blanking start point	40				
	9	CHBW	U/V H Blanking width	138				
	10	CBKO	U/V H Blanking start point	40				
	11	CHBO	Internal U/V H Blanking ON/OFF	0				
	12	VHBL	V H Blanking level adjustment	0				
	13	UHBL	U H Blanking level adjustment	0				
	14	UVDL	U/V output delay	0				
	15	YDL	Y output delay	0				
	16	PVDI	VD input polarity	0				
	17	PHDI	HD input polarity	0				
	18	HDW	HD pulse width	16				
	19	PVDO	VD output polarity	0				
	20	PHDO	HD output polarity	0				
	21	HST	HD out pulse start position	54				
	22	VDL	VD out Pulse start position	0				
	23	VDW	VD out Pulse width	3				
	24	NDET	Noise detection point	0				
	25	NVP	Noise detect line	2				
	26	NDTS	Noise detect sencitivity	3				
	27	HROF	H Reference pulse ON/OFF (ON=0)	0				
	28	NDGW	Noise detect gate width	9				
	29	UOFS	U Offset level	1				
	30	POT	Output Port 0/1 Control	0				
	31	UVF	UV Frag polarity	0				
	32	APC	AP Clock polarity	1				
	33	DAP	DAC power save (ON=1)	0				
	34	YLV	Y NR level	Vivid	RF/V1-V4	9	V5-V7 (480i)	8
				Standard	RF/V1-V4	9	V5-V7 (480i)	8
				Movie	RF/V1-V4	8	V5-V7 (480i)	8
				Pro	RF/V1-V4	8	V5-V7 (480i)	8
	35	YST	Setup forced standard detection	0				
	36	YNT	Y NTSC Standard detection	1				
	37	YPL	Y PAL Standard detection	1				
	38	YMV	Y Moving detection filter (ON=0)	0				
	39	YCR	Y Moving detection Coring level	Vivid	RF/V1-V4	3	V5-V7 (480i)	0
				Standard	RF/V1-V4	3	V5-V7 (480i)	0
				Movie	RF/V1-V4	3	V5-V7 (480i)	0
				Pro	RF/V1-V4	3	V5-V7 (480i)	0
	40	VOS	V Offset level	0				
	41	YMG	Y Moving detection gain	Vivid	RF/V1-V4	3	V5-V7 (480i)	3
				Standard	RF/V1-V4	3	V5-V7 (480i)	3
				Movie	RF/V1-V4	3	V5-V7 (480i)	3
				Pro	RF/V1-V4	3	V5-V7 (480i)	3

SERVICE DATA LISTS

CATEGORY	#	ITEM	DESCRIPTION	DATA				
3DNR (TC90A90F)	42	YEG	Y Moving detect on (ON=1)	0				
	43	YEL	Y edge moving detection sensitivity	Vivid	RF/V1-V4	6	V5-V7 (480i)	6
				Standard	RF/V1-V4	6	V5-V7 (480i)	6
				Movie	RF/V1-V4	6	V5-V7 (480i)	6
				Pro	RF/V1-V4	6	V5-V7 (480i)	6
3D Noise Reduction	44	YLM	Y NR Feed back limit level	Vivid	RF/V1-V4	6	V5-V7 (480i)	6
				Standard	RF/V1-V4	6	V5-V7 (480i)	6
				Movie	RF/V1-V4	6	V5-V7 (480i)	6
				Pro	RF/V1-V4	6	V5-V7 (480i)	6
	45	CLV	C NR level	Vivid	RF/V1-V4	9	V5-V7 (480i)	8
				Standard	RF/V1-V4	9	V5-V7 (480i)	8
				Movie	RF/V1-V4	8	V5-V7 (480i)	8
				Pro	RF/V1-V4	8	V5-V7 (480i)	8
	46	CNT	Relate C NR to YSTDN	1				
	47	CPL	Relate C NR to YSTDP	1				
	48	CMG	C Moving detection gain	Vivid	RF/V1-V4	3	V5-V7 (480i)	3
				Standard	RF/V1-V4	3	V5-V7 (480i)	3
				Movie	RF/V1-V4	3	V5-V7 (480i)	3
				Pro	RF/V1-V4	3	V5-V7 (480i)	3
	49	CCR	C Moving detection coring level	Vivid	RF/V1-V4	3	V5-V7 (480i)	0
				Standard	RF/V1-V4	3	V5-V7 (480i)	0
				Movie	RF/V1-V4	3	V5-V7 (480i)	0
				Pro	RF/V1-V4	3	V5-V7 (480i)	0
	50	CLM	C NR Feed back limit level	Vivid	RF/V1-V4	6	V5-V7 (480i)	6
				Standard	RF/V1-V4	6	V5-V7 (480i)	6
				Movie	RF/V1-V4	6	V5-V7 (480i)	6
				Pro	RF/V1-V4	6	V5-V7 (480i)	6
	51	NVSL	NR Vertical start line	20				
	52	NVSH		0				
	53	NHS	NR Horizontal start position	16				
	54	NVEL	NR Vertical end line	248				
	55	NVEH		0				
	56	NHE	NR Horizontal end position	120				
	57	YNG	Y Coring gain	Vivid	RF/V1-V4	3	V5-V7 (480i)	3
				Standard	RF/V1-V4	3	V5-V7 (480i)	3
				Movie	RF/V1-V4	3	V5-V7 (480i)	3
				Pro	RF/V1-V4	3	V5-V7 (480i)	3
	58	COR	Coring/through (Coring=0)	Vivid	RF/V1-V4	0	V5-V7 (480i)	0
				Standard	RF/V1-V4	0	V5-V7 (480i)	0
				Movie	RF/V1-V4	0	V5-V7 (480i)	0
				Pro	RF/V1-V4	0	V5-V7 (480i)	0
	59	LPF	LPF on/off (on=0)	Vivid	RF/V1-V4	0	V5-V7 (480i)	0
				Standard	RF/V1-V4	0	V5-V7 (480i)	0
				Movie	RF/V1-V4	0	V5-V7 (480i)	0
				Pro	RF/V1-V4	0	V5-V7 (480i)	0
	60	YLT	Y Coring limit level	Vivid	RF/V1-V4	6	V5-V7 (480i)	6
				Standard	RF/V1-V4	6	V5-V7 (480i)	6
				Movie	RF/V1-V4	6	V5-V7 (480i)	6
				Pro	RF/V1-V4	6	V5-V7 (480i)	6

SERVICE DATA LISTS

CATEGORY	#	ITEM	DESCRIPTION	DATA													
3DNR (TC90A90F) 3D Noise Reduction	61	YNC	Y Coring offset level	Vivid	RF/V1-V4	9	V5-V7 (480i)	8									
				Standard	RF/V1-V4	9	V5-V7 (480i)	8	* Item 61 YNC data should be the same as Item 34 YNR data.								
				Movie	RF/V1-V4	8	V5-V7 (480i)	8									
				Pro	RF/V1-V4	8	V5-V7 (480i)	8									
	62	YCO	Y Coring off (on=1)	Vivid	RF/V1-V4	0	V5-V7 (480i)	0									
				Standard	RF/V1-V4	0	V5-V7 (480i)	0									
				Movie	RF/V1-V4	0	V5-V7 (480i)	0									
				Pro	RF/V1-V4	0	V5-V7 (480i)	0									
	63	ADTH	0: DNR, 1: AD	0													
DRCV (CXD2097) DRC-VOL	0	MFVR	DRC ID [0: DRC-VOL, 1: DRC-MF]	0													
	1	ISEL	Input select [0:A/D 1:3DNR]	1													
	2	ORES	Reality (Resolution Effect) Offset	Vivid	RF	128	V1-V4	128	V5, V6	128	V7	128					
				Standard	RF	128	V1-V4	128	V5, V6	128	V7	128					
				Movie	RF	128	V1-V4	128	V5, V6	128	V7	128					
				Pro	RF	128	V1-V4	128	V5, V6	128	V7	128					
	3	ONCT	Clarity (Noise Effect) Offset	Vivid	RF	128	V1-V4	128	V5, V6	128	V7	128					
				Standard	RF	128	V1-V4	128	V5, V6	128	V7	128					
				Movie	RF	128	V1-V4	128	V5, V6	128	V7	128					
				Pro	RF	128	V1-V4	128	V5, V6	128	V7	128					
	4	AINI	User Clarity (Noise) Initial Position	CUSTOM1	0	CUSTOM2	49	CUSTOM3	79								
	5	BINI	User Reality (Resolution) Initial Position	CUSTOM1	24	CUSTOM2	54	CUSTOM3	89								
	6	FMAT	Film Mode Automatic 525P [1: ON, 0: OFF]	0													
	7	FMTH	Film Mode Threshold	Other	1	RF	1	[0: DVD, 1: CXD2095, 2: air strong electric fields, 3: air medium electric fields]									
	8	FSEL	Y Horizontal Filter [1: OFF, 0: ON]	1													
	9	CDLY	C-Y Delay	2													
	10	LMIT	Peak Limiter [1: Slew, 0: Limiter ON]	0													
	11	LMLV	Limit Level	Vivid	2	Standard	2	Movie	2	Pro	2						
	12	LMSL	Peak Limiter Ref. for Progressive	1	[1: Automatic, 0: Fixed]												
	13	VDLY	Input vertical signal delay	1													
	14	VDPR	Vertical Signal Sample Timing Switch	3	[Normally High]												
	15	WPLL	TBC Horizontal Phase Switching	2	[Normally High]												
	16	CRCT	Text Countermeasures Circuit [1: ON, 0: OFF]	0													
	17	NRA		SNNR(1)	0	SNNR(2)	0	SNNR(3)	0	SNNR(4)	0	SNNR(5)	0	SNNR(6)	0	SNNR(7)	0
	18	NRB		SNNR(1)	128	SNNR(2)	128	SNNR(3)	128	SNNR(4)	128	SNNR(5)	128	SNNR(6)	128	SNNR(7)	128

SERVICE DATA LISTS

CATEGORY	#	ITEM	DESCRIPTION	MIN	MAX	Full / Normal	Zoom	WideZoom	1080i
PJE	0	FDIS	Display fine adjustment data	0	1	1			
	1	AREA	Model Select [0: GA, 1: US, 2: Europe]	0	2	1			
	2	COPY	Service copy adjustment	0	1	0			
	3	ALCP	Service all copy adjustment	0	1	0			
	4	OSDH	Osd horiz position of PJED service menu	1	255	11			
	5	OSDV	Osd vert pos of PJED service menu	1	255	57	106	78	15
	6	FVSL	Start position of fine adjustment	0	15	0	14	15	0
	7	FVSP	Start line of fine adjustment	0	255	3	21	25	53
	8	V1DL	Value of V1 delay	0	255	1	140	61	1
	9	V1CU	Value of V1 count up	0	4095	454	598	506	387
	10	V1OH	Value of V1 offset upper data	0	255	5	5	5	79
	11	COHP	Horizontal phase for rough adjustment	0	4095	0			
	12	FIHP	Horizontal phase for fine adjustment	0	4095	1111			
	13	TPHP	Horizontal phase for test pattern	0	4095	72			
	14	TPVP	Vertical phase for test pattern	0	255	55	111	79	15
	15	DFHP	H phase for dyn focus (57")	0	4095	190			
			H phase for dyn focus (65")			190			
			H phase for dyn focus (65" 4% bigger)			200			
	16	DFHG	H parabola for dyn focus (57")	-128	127	-85	-85	-85	-85
			H parabola for dyn focus (65")			-100	-100	-100	-100
			H parabola for dyn focus (65" 4% bigger)			-95	-95	-95	-95
	17	DFVG	V parabola for dyn focus (57")	-128	127	-65	-65	-65	-65
			V parabola for dyn focus (65")			-70	-70	-70	-70
			V parabola for dyn focus (65" 4% bigger)			-95	-95	-95	-95
	18	DFDC	Center for dyn focus (57")	-128	127	127	127	127	127
			Center for dyn focus (65")			127	127	127	127
			Center for dyn focus (65" 4% bigger)			127	127	127	127
	19	DFV1	V1 saw for dyn focus (57")	-128	127	-50	-50	-50	-50
			V1 saw for dyn focus (65")			-50	-50	-50	-50
			V1 saw for dyn focus (65" 4% bigger)			-50	-50	-50	-50
	20	SDHP	Compensation of horiz phase for shading	0	4095	500			
	21	SDH1	Horizontal saw wave for dynamic focus	-128	127	127	127	127	127
	22	BDVU	Vertical position for border line 1	0	2047	27	21	12	53
	23	BDVL	Vertical position for border line 2	0	2047	901	683	820	1035
	24	BDHL	Horizontal position for boder line 1	0	2047	152	152	145	152
	25	BDHR	Horizontal position for boder line 2	0	2047	1254	1254	1261	1254
	26	HBLD	Horizontal phase for output of H.Blank out	0	4095	32			
	27	HBLW	Width for output of H.Blank out	0	4095	143			
	28	PWM2	PWM2 Regi IC output width (57")	0	4095	730			
			PWM2 Regi IC output width (65")			730			
			PWM2 Regi IC output width (65" 4% bigger)			730			

SERVICE DATA LISTS

CATEGORY	#	ITEM	DESCRIPTION	MIN	MAX	DATA
PJE	29	R0GH	Green Horizontal Sensor 0 Ratio Offset	-128	127	-
	30	R0RH	Red Horizontal Sensor 0 Ratio Offset	-128	127	-
	31	R0BH	Blue Horizontal Sensor 0 Ratio Offset	-128	127	-
	32	R1GH	Green Horizontal Sensor 1 Ratio Offset	-128	127	-
	33	R1RH	Red Horizontal Sensor 1 Ratio Offset	-128	127	-
	34	R1BH	Blue Horizontal Sensor 1 Ratio Offset	-128	127	-
	35	R1GV	Green Vertical Sensor 1 Ratio Offset	-128	127	-
	36	R1RV	Red Vertical Sensor 1 Ratio Offset	-128	127	-
	37	R1BV	Blue Vertical Sensor 1 Ratio Offset	-128	127	-
	38	R2GH	Green Horizontal Sensor 2 Ratio Offset	-128	127	-
	39	R2RH	Red Horizontal Sensor 2 Ratio Offset	-128	127	-
	40	R2BH	Blue Horizontal Sensor 2 Ratio Offset	-128	127	-
	41	R2GV	Green Vertical Sensor 2 Ratio Offset	-128	127	-
	42	R2RV	Red Vertical Sensor 2 Ratio Offset	-128	127	-
	43	R2BV	Blue Vertical Sensor 2 Ratio Offset	-128	127	-
	44	R3GH	Green Horizontal Sensor 3 Ratio Offset	-128	127	-
	45	R3RH	Red Horizontal Sensor 3 Ratio Offset	-128	127	-
	46	R3BH	Blue Horizontal Sensor 3 Ratio Offset	-128	127	-
	47	PTRH	Red Horiz Top Pattern Position Offset	-128	127	-
	48	PTBH	Blue Horiz Top Pattern Position Offset	-128	127	-
	49	PLRH	Red Horiz Left Pattern Position Offset	-128	127	-
	50	PLBH	Blue Horiz Left Pattern Position Offset	-128	127	-
	51	PLRV	Red Vertical Left Pattern Position Offset	-128	127	-
	52	PLBV	Blue Vertical Left Pattern Position Offset	-128	127	-
	53	PRRH	Red Horiz Right Pattern Position Offset	-128	127	-
	54	PRBH	Blue Horiz Right Pattern Pos Offset	-128	127	-
	55	PRGV	Green Vertical Right Pattern Pos Offset	-128	127	-
	56	PRRV	Red Vertical Right Pattern Pos Offset	-128	127	-
	57	PRBV	Blue Vertical Right Pattern Pos Offset	-128	127	-
	58	PBGH	Green Horiz Bottom Pattern Pos Offset	-128	127	-
	59	PBRH	Red Horiz Bottom Pattern Pos Offset	-128	127	-
	60	PBBH	Blue Horiz Bottom Pattern Pos Offset	-128	127	-

SERVICE DATA LISTS

♣	Adjustable - M Board CBA
♦	Adjustable - B Board CBA
♠	Adjustable - On Line (STD LIST)

CATEGORY	#	ITEM	DESCRIPTION	MIN	MAX								
PJE	61	ERR	Auto Regi. Error code	0	-	0							
	62	ADTM	A/D data input timing of Auto Regi.	0	127	81							
	63	ADT2	A/D data input timing of Auto Regi. #2	0	255	115							
	64	SZLM	Size Limit	-128	127	0							
	65	RTLM	Ratio Limit	0	127	90							
	66	VUP	Auto Regi. Pattern Upper V position	0	2047	57"	41	65"	41				
	67	VMID	Auto Regi. Pattern Middle V position	0	2047	57"	505	65"	505				
	68	VLOW	Auto Regi. Pattern Lower V position	0	2047	57"	971	65"	971				
	69	HLE	Auto Regi. Pattern left H position	0	4095	57"	55	65"	55				
	70	HMID	Auto Regi. Pattern middle H position	0	4095	57"	636	65"	636				
	71	HRIV	Auto Regi. Pattern right H position	0	4095	57"	1217	65"	1217				
	72	TEST				0							
	73	SFTF	Fast motion of burn prevention switch	0	1	0							
	74	SFTE	CRT burn prevention enable	0	5	4	[0: Off, 1: 120sec, 2: 60sec, 3: 30sec, 4: 15sec, 5: 8sec]						
	75	ACTL	Acount timer counter lower byte	0	-	0							
	76	ACTH	Acount timer counter upper byte	0	-	0							
	77	ATTN	Auto Regi adjustment item select	0	3	57"	0	65"	0				
	78	VB1S	VBLKOUT1 Horizontal Phase	0	1023	Full / Normal	0	Zoom	0	W Zoom	0	1080i	0
	79	VB1W	VBLKOUT1 Output Width	0	1023	Full / Normal	16	Zoom	16	W Zoom	16	1080i	16
	80	VB2S	VBLKOUT2 Horizontal Phase	0	1023	Full / Normal	0	Zoom	0	W Zoom	0	1080i	0 *
	81	VB2W	VBLKOUT2 Output Width	0	1023	Full / Normal	54	Zoom	110	W Zoom	72	1080i	24
	82	VB3S	VBLKOUT3 Horizontal Phase	0	1023	Full / Normal	520	Zoom	464	W Zoom	502	1080i	550
	83	VB3W	VBLKOUT3 Output Width	0	1023	Full / Normal	42	Zoom	98	W Zoom	60	1080i	12
	84	VB4S	VBLKOUT4 Horizontal Phase			Full / Normal	0	Zoom	0	W Zoom	0	1080i	7
	85	VB4W	VBLKOUT4 Output Width			Full / Normal	5	Zoom	5	W Zoom	5	1080i	5

* PJE INIT (7+ENTER) writes "0" only to sub deflection presets and fine regi data of the deflection mode you are in.

ITEM	DESCRIPTION	MIN	MAX	Full / Normal ♠						Zoom ♠					
				Green		Blue		Red		Green		Blue		Red	
CENT	Center Registration Adjustment	-512	511	35	20	35	20	35	20	35	20	35	20	35	20
SKEW	Skew Registration Adjustment	-512	511	0	0	0	0	0	0	0	0	0	0	0	0
SIZE	Size Registration Adjustment	-512	511	-100	-75	-100	-75	-100	-75	-100	-75	-100	-75	-100	-75
LIN	Linearity Registration Adjustment	-512	511	0	0	-425	0	425	0	0	0	-425	0	425	0
KEY	Keystone Registration Adjustment	-512	511	N/A	0	N/A	-120	N/A	120	N/A	0	N/A	-120	N/A	120
PIN	Pincushion Registration Adjustment	-512	511	0	400	0	350	0	350	0	400	0	350	0	350
MLIN	Middle Linearity Registration Adjustment	-512	511	0	N/A	150	N/A	-150	N/A	0	N/A	150	N/A	-150	N/A
MSIZ	Middle Size Registration Adjustment	-512	511	-200	N/A	-100	N/A	-100	N/A	-200	N/A	-100	N/A	-100	N/A

ITEM	DESCRIPTION	MIN	MAX	Wide Zoom ♠						1080i / Twin ♠					
				Green		Blue		Red		Green		Blue		Red	
CENT	Center Registration Adjustment	-512	511	35	20	35	20	35	20	35	20	35	20	35	20
SKEW	Skew Registration Adjustment	-512	511	0	0	0	0	0	0	0	0	0	0	0	0
SIZE	Size Registration Adjustment	-512	511	-100	-75	-100	-75	-100	-75	-100	-75	-100	-75	-100	-75
LIN	Linearity Registration Adjustment	-512	511	0	0	-425	0	425	0	0	0	-425	0	425	0
KEY	Keystone Registration Adjustment	-512	511	N/A	0	N/A	-120	N/A	120	N/A	0	N/A	-120	N/A	120
PIN	Pincushion Registration Adjustment	-512	511	0	400	0	350	0	350	0	400	0	350	0	350
MLIN	Middle Linearity Registration Adjustment	-512	511	0	N/A	150	N/A	-150	N/A	0	N/A	150	N/A	-150	N/A
MSIZ	Middle Size Registration Adjustment	-512	511	-200	N/A	-100	N/A	-100	N/A	-200	N/A	-100	N/A	-100	N/A

* FINE Adjustment should be limited to less than +-107 steps for each point.

SERVICE DATA LISTS

CATEGORY	#	ITEM	DESCRIPTION			DATA
OP	0	DLY1	Delay time1 of power on sequence			12
	1	DLY2	Delay time2 of power on sequence			18
	2	DLY3	Delay time3 of power on sequence			7
	3	OSDH	OSD H position [0:LEFT, 254:RIGHT]			13 ♠
	4	HDPT	1080i through sw [0:through, 1:MID]			1
	5	MSBG	Memory Stic Background Color			80
	6	AACK	Audio DSP ACK Checking Switch			2
	7	RAMW	RAM window display [0:OFF, 1:DISPLAY]			0

♣	Adjustable - M Board CBA
♦	Adjustable - B Board CBA
♠	djustable - On Line (STD LIS

[0: No checking at mode change / refresh, 1: Checking at refresh only, 2: Checking at mode change / refresh, 3: N/A]

					INDEX							
CATEGORY	#	ITEM	DESCRIPTION	DATA	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
ID	0	ID0	Language/System	89	Korean 0	French 1	Portuguese 0	Spanish 1	English 1	PAL-N 0	PAL-M 0	NTSC 1
	1	ID1	Video Input	255	DVI input 1	V3 - S Video 1	V2 - S Video 1	V1 - S Video 1	Video4 1	Video3 1	Video2 1	Video1 1
	2	ID2	Audio	239	Auto Vol 1	Auto Mute 1	Surround1 1	Surround0 0	Audio out 1	Bass/Treb/Bal 1	Spkr SW 1	MTS 1
	3	ID3	Etc	107	AC stay off 0	Front Panel Cntr 1	Vchip-US 1	Vchip-Canada 0	2:3Pull 1	Key power 0	Stereo/main 1	DRC Vol 1
	4	ID4	Etc2	75	Tilt Corr 0	3D Comb 1	No-sig. auto off 0	CH block 0	Comb 1	Spot Kil 0	XDS 1	CC 1
	5	ID5	Etc3	243	Wideband VM 1	NR 1	Color Temp 1	VM 1	TV out 0	MS "ACCESS" off 0	MS Button toggle 1	Mem Stic 1
	6	ID6	Sub Picture	126	0	Scrolling Index 1	MultPic 1 1	MultPic 0 1	Attenna SW 1 1	Attenna SW 0 1	2Tu PIP 1	1Tu PIP 0
	7	ID7	Etc4	27	0	Latin 0	PIP for Twin 0	AutoSAP 1	XBR / HS 1	Center SP 0	PJ / Direct View 1	Widescrn 1

INITIALIZATION SEQUENCES

MID NVM only (MAIN_A8):	7+JUMP+Enter
Main NVM only (MAIN_A0)	7+9+Enter
All NVM including PJED: (PJED_A0 + MAIN_A0 + MAIN_A8	7+Audio Effect+Enter
PJED REGISTRATION DATA only	7+Enter (in PJE service)

2-11-1. MODEL NVM DIFFERENCE

SERVICE ITEM				
ITEM	**57WV600**	**65WV600**	**57WV700**	**65WV700**
2170P-4 8 - UBRT (VIVID)	19	19	28	28
2170P-4 10 - USHP (VIVID)	25	25	29	29
2170P-4 7 - UPIC (STANDARD)	47	47	50	50
2170P-4 8 - UBRT (STANDARD)	31	31	36	36
2170P-4 7 - UPIC (MOVIE)	18	18	20	20
2170P-4 8 - UBRT (MOVIE)	31	31	34	34
2170P-4 22 - BLK (1080iV5-6, VIVID)	3	3	2	2
2170P-4 22 - BLK (720PV5-6, VIVID)	3	3	2	2
2170P-4 22 - BLK (1080iV7, VIVID)	3	3	2	2
2170P-4 22 - BLK (720PV7, VIVID)	3	3	2	2
2170P-4 22 - BLK (MS PLAY, VIVID)	3	3	2	2
2170P-4 19 - GAMR (GAMM=1)	4	4	6	6
2170P-4 20 - GAMG (GAMM=1)	4	4	6	6
2170P-4 21 - GAMB (GAMM=1)	4	4	6	6
2170P-4 19 - GAMR (GAMM=2)	3	3	4	4
2170P-4 20 - GAMG (GAMM=2)	3	3	4	4
2170P-4 21 - GAMB (GAMM=2)	3	3	4	4
2170P-4 19 - GAMR (GAMM=3)	7	7	9	9
2170P-4 20 - GAMG (GAMM=3)	7	7	9	9
2170P-4 21 - GAMB (GAMM=3)	7	7	9	9
2170P-4 23 - DCTR (BLK=1)	10	10	5	5
2170P-4 24 - APED (BLK=1)	2	2	1	1
2170P-4 23 - DCTR (BLK=3)	15	15	8	8
SNNR 5 - CCOR (SNNR=1)	2	2	0	0
SNNR 8 - 3SHP (SNNR=1)	2	2	0	0
SNNR 5 - CCOR (SNNR=2)	2	2	1	1
SNNR 8 - 3SHP (SNNR=2)	3	3	0	0
SNNR 5 - CCOR (SNNR=3)	2	2	1	1
SNNR 8 - 3SHP (SNNR=3)	5	5	0	0
SNNR 8 - 3SHP (SNNR=4)	6	6	0	0
SNNR 5 - CCOR (SNNR=5)	3	3	2	2
SNNR 8 - 3SHP (SNNR=5)	7	7	0	0
SNNR 8 - 3SHP (SNNR=6)	8	8	0	0
SNNR 8 - 3SHP (SNNR=7)	10	10	1	1
2170P-3 15 - UHOF (1080iV7, VIVID)	1	1	2	2

SERVICE ITEM				
ITEM	**57WV600**	**65WV600**	**57WV700**	**65WV700**
2170P-3 4 - VMF0 (RF, VIVID)	0	0	2	2
2170P-3 5 - VMDL (RF, VIVID)	15	15	8	8
2170P-3 6 - SHOF (RF, VIVID)	0	0	2	2
2170P-3 14 - UCOF (RF, VIVID)	3	3	0	0
2170P-3 4 - VMF0 (V1-4, VIVID)	0	0	2	2
2170P-3 5 - VMDL (V1-4, VIVID)	15	15	8	8
2170P-3 13 - UBOF (V1-4, VIVID)	2	2	3	3
2170P-3 14 - UCOF (V1-4, VIVID)	3	3	1	1
2170P-3 15 - UHOF (V1-4, VIVID)	0	0	3	3
2170P-3 4 - VMF0 (480iV5-6, VIVID)	1	1	2	2
2170P-3 5 - VMDL (480iV5-6, VIVID)	11	11	8	8
2170P-3 6 - SHOF (480iV5-6, VIVID)	2	2	1	1
2170P-3 13 - UBOF (480iV5-6, VIVID)	4	4	3	3
2170P-3 14 - UCOF (480iV5-6, VIVID)	3	3	1	1
2170P-3 15 - UHOF (480iV5-6, VIVID)	1	1	3	3
2170P-3 4 - VMF0 (480PV5-6, VIVID)	1	1	2	2
2170P-3 5 - VMDL (480PV5-6, VIVID)	11	11	8	8
2170P-3 15 - UHOF (480PV5-6, VIVID)	0	0	2	2
2170P-3 6 - SHOF (1080iV5-6, VIVID)	3	2	2	2
2170P-3 14 - UCOF (1080iV5-6, VIVID)	2	1	3	3
2170P-3 15 - UHOF (1080iV5-6, VIVID)	1	1	2	2
2170P-3 6 - SHOF (720PV5-6, VIVID)	3	2	2	2
2170P-3 14 - UCOF (720PV5-6, VIVID)	2	1	3	3
2170P-3 15 - UHOF (720PV5-6, VIVID)	1	1	2	2
2170P-3 4 - VMF0 (480iV7, VIVID)	1	1	2	2
2170P-3 5 - VMDL (480iV7, VIVID)	11	11	8	8
2170P-3 6 - SHOF (480iV7, VIVID)	2	2	1	1
2170P-3 13 - UBOF (480iV7, VIVID)	4	4	3	3
2170P-3 14 - UCOF (480iV7, VIVID)	3	3	1	1
2170P-3 15 - UHOF (480iV7, VIVID)	1	1	3	3
2170P-3 4 - VMF0 (480PV7, VIVID)	1	1	2	2
2170P-3 5 - VMDL (480PV7, VIVID)	11	11	8	8
2170P-3 15 - UHOF (480PV7, VIVID)	0	0	2	2
2170P-3 6 - SHOF (1080iV7, VIVID)	3	2	2	2
2170P-3 14 - UCOF (1080iV7, VIVID)	2	1	3	3

MODEL NVM DIFFERENCE

SERVICE ITEM				
ITEM	**57WV600**	**65WV600**	**57WV700**	**65WV700**
2170P-3 6 - SHOF (720PV7, VIVID)	3	2	2	2
2170P-3 14 - UCOF (720PV7, VIVID)	2	1	3	3
2170P-3 15 - UHOF (720PV7, VIVID)	1	1	2	2
2170P-3 6 - SHOF (MS PLAY, VIVID)	3	2	2	2
2170P-3 14 - UCOF (MS PLAY, VIVID)	2	1	3	3
2170P-3 15 - UHOF (MS PLAY, VIVID)	1	1	2	2
2170P-3 4 - VMF0 (TWIN, VIVID)	0	0	2	2
2170P-3 5 - VMDL (TWIN, VIVID)	15	15	8	8
2170P-3 13 - UBOF (TWIN, VIVID)	4	4	0	0
2170P-3 14 - UCOF (TWIN, VIVID)	2	1	0	0
2170P-3 4 - VMF0 (RF, STANDARD)	0	0	2	2
2170P-3 5 - VMDL (RF, STANDARD)	15	15	8	8
2170P-3 6 - SHOF (RF, STANDARD)	0	0	2	2
2170P-3 14 - UCOF (RF, STANDARD)	1	1	0	0
2170P-3 15 - UHOF (RF, STANDARD)	1	1	2	2
2170P-3 4 - VMF0 (V1-4, STANDARD)	0	0	2	2
2170P-3 5 - VMDL (V1-4, STANDARD)	15	15	8	8
2170P-3 6 - SHOF (V1-4, STANDARD)	1	1	2	2
2170P-3 13 - UBOF (V1-4, STANDARD)	1	1	0	0
2170P-3 14 - UCOF (V1-4, STANDARD)	2	2	0	0
2170P-3 15 - UHOF (V1-4, STANDARD)	0	0	3	3
2170P-3 4 - VMF0 (480iV5-6, STANDARD)	1	1	2	2
2170P-3 5 - VMDL (480iV5-6, STANDARD)	11	11	8	8
2170P-3 6 - SHOF (480iV5-6, STANDARD)	1	1	2	2
2170P-3 15 - UHOF (480iV5-6, STANDARD)	1	1	3	3
2170P-3 4 - VMF0 (480PV5-6, STANDARD)	1	1	2	2
2170P-3 5 - VMDL (480PV5-6, STANDARD)	11	11	8	8
2170P-3 6 - SHOF (480PV5-6, STANDARD)	1	1	0	0
2170P-3 14 - UCOF (480PV5-6, STANDARD)	1	1	0	0
2170P-3 15 - UHOF (480PV5-6, STANDARD)	0	0	2	2
2170P-3 14 - UCOF (1080iV5-6, STANDARD)	0	0	1	1
2170P-3 15 - UHOF (1080iV5-6, STANDARD)	1	1	2	2
2170P-3 14 - UCOF (720PV5-6, STANDARD)	0	0	1	1
2170P-3 15 - UHOF (720PV5-6, STANDARD)	1	1	2	2
MID5 1 - MHLY (POP 5)	1	1	2	2

SERVICE ITEM				
ITEM	**57WV600**	**65WV600**	**57WV700**	**65WV700**
2170P-3 4 - VMF0 (480iV7, STANDARD)	1	1	2	2
2170P-3 5 - VMDL (480iV7, STANDARD)	11	11	8	8
2170P-3 6 - SHOF (480iV7, STANDARD)	1	1	2	2
2170P-3 15 - UHOF (480iV7, STANDARD)	1	1	3	3
2170P-3 4 - VMF0 (480PV7, STANDARD)	1	1	2	2
2170P-3 5 - VMDL (480PV7, STANDARD)	11	11	8	8
2170P-3 6 - SHOF (480PV7, STANDARD)	1	1	0	0
2170P-3 15 - UHOF (480PV7, STANDARD)	0	0	2	2
2170P-3 14 - UCOF (1080iV7, STANDARD)	0	0	1	1
2170P-3 15 - UHOF (1080iV7, STANDARD)	1	1	2	2
2170P-3 14 - UCOF (720PV7, STANDARD)	0	0	1	1
2170P-3 15 - UHOF (720PV7, STANDARD)	1	1	2	2
2170P-3 14 - UCOF (MS PLAY, STANDARD)	0	0	1	1
2170P-3 15 - UHOF (MS PLAY, STANDARD)	1	1	2	2
2170P-3 4 - VMF0 (TWIN, STANDARD)	0	0	2	2
2170P-3 5 - VMDL (TWIN, STANDARD)	15	15	8	8
2170P-3 13 - UBOF (RF, STANDARD)	1	1	5	5
2103-1 6 - SHAP (OTHERS)	11	11	6	6
2103-1 6 - SHAP (V1-4)	11	11	8	8
2103-1 24 - ATPD (TWIN BLK=1)	1	1	3	3
2103-1 25 - DCTR (TWIN BLK=1)	2	2	3	3
3DCOMB 21 - YHCO	3	3	2	2
3DCOMB 18 - YPFG (V1-4, MOVIE)	6	6	5	5
AUDIO 10 - STRE	4	5	4	5
AUDIO 2 - BACV	1	2	1	2
AUDIO 16 - BBEL (SURROUND OFF, S.S. OF	1	2	1	2
AUDIO 16 - BBEL (SURROUND OFF, S.S. AU	1	2	1	2
AUDIO 16 - BBEL (TRUSURROUND)	1	3	1	3
AUDIO 16 - BBEL (SIMULATED)	1	2	1	2
2170P-3 14 - UCOF (MS MENU, VIVID)	2	1	3	3
2170P-3 15 - UHOF (MS MENU, VIVID)	1	1	2	2
2170P-3 14 - UCOF (MS MENU, STANDARD)	0	0	1	1
2170P-3 15 - UHOF (MS MENU, STANDARD)	1	1	2	2
2170P-4 22 - BLK (MS MENU, VIVID)	3	3	2	2
MID5 1 - MHLY (POP 0)	1	1	2	2

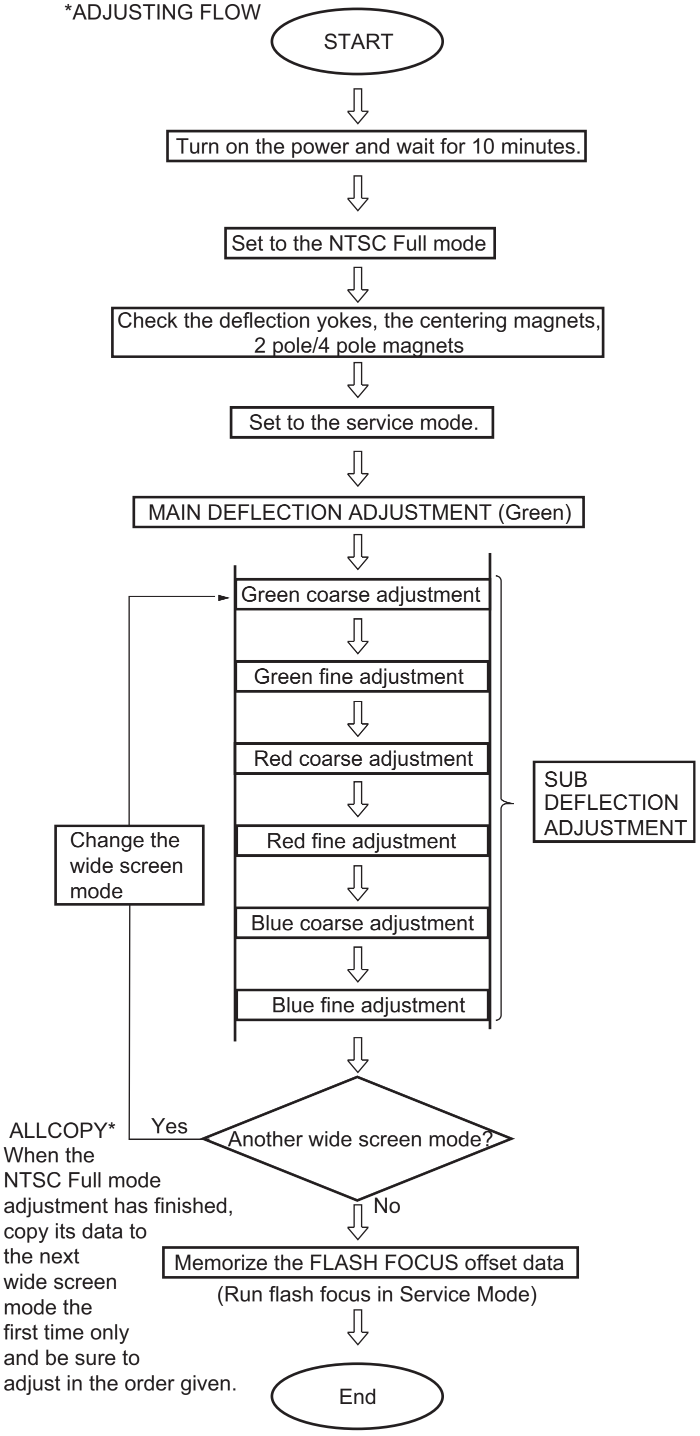
MODEL NVM DIFFERENCE

SERVICE ITEM				
ITEM	**57WV600**	**65WV600**	**57WV700**	**65WV700**
MID5 6 - MHYL (POP 5)	1	1	2	2
MID5 7 - MHYE (POP 5)	0	0	7	7
MID5 15 - MVYE (POP 5)	5	5	3	3
MID5 1 - MHLY (POP 7)	1	1	2	2
MID5 6 - MHYL (POP 7)	1	1	2	2
MID5 7 - MHYE (POP 7)	0	0	7	7
MID5 13 - MVYR (POP 7)	3	3	2	2
MID5 15 - MVYE (POP 7)	5	5	3	3
MID5 5 - MHYR (POP 11)	1	1	2	2
MID5 6 - MHYL (POP 11)	1	1	2	2
MID5 7 - MHYE (POP 11)	7	7	4	4
MID5 13 - MVYR (POP 11)	1	1	2	2
MID5 15 - MVYE (POP 11)	5	5	3	3
MID5 5 - MHYR (POP 12)	1	1	2	2
MID5 6 - MHYL (POP 12)	1	1	2	2
MID5 13 - MVYR (POP 12)	1	1	3	3
MID5 15 - MVYE (POP 12)	5	5	3	3
MID5 7 - MHYE (POP 16)	7	7	2	2
MID5 15 - MVYE (POP 16)	5	5	3	3
MID5 5 - MHYR (POP 17)	1	1	3	3
MID5 15 - MVYE (POP 17)	7	7	5	5
MID5 5 - MHYR (POP 21)	1	1	2	2
MID5 6 - MHYL (POP 21)	1	1	2	2
MID5 7 - MHYE (POP 21)	4	4	0	0
MID5 13 - MVYR (POP 21)	1	1	2	2
MID5 15 - MVYE (POP 21)	5	5	3	3
MID5 7 - MHYE (POP 22)	0	0	4	4
MID5 13 - MVYR (POP 22)	1	1	2	2
MID5 15 - MVYE (POP 22)	7	7	5	5

SERVICE ITEM				
ITEM	**57WV600**	**65WV600**	**57WV700**	**65WV700**
PJE 16 - DFHG	-85	-100	-85	-100
PJE 17 - DFVG	-65	-70	-65	-70

2-12. REGISTRATION ADJUSTMENT (PJE MODE ONLY)

*ADJUSTING FLOW

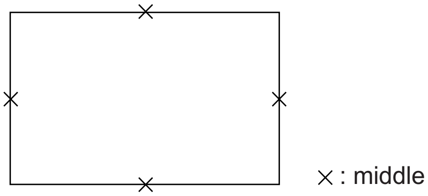

START
Turn on the power and wait for 10 minutes.
Set to the NTSC Full mode
Check the deflection yokes, the centering magnets, 2 pole/4 pole magnets
Set to the service mode.
MAIN DEFLECTION ADJUSTMENT (Green)
Green coarse adjustment
Green fine adjustment
Red coarse adjustment
Red fine adjustment
Blue coarse adjustment
Blue fine adjustment
SUB DEFLECTION ADJUSTMENT
Change the wide screen mode
ALLCOPY*
Yes
Another wide screen mode?
No
Memorize the FLASH FOCUS offset data
(Run flash focus in Service Mode)
End

* When the NTSC Full mode adjustment has finished, copy its data to the next wide screen mode the first time only and be sure to adjust in the order given.

2-12-1. SETUP FOR ADJUSTMENT

MARKING

- At the 4 sides of the screen, locate the middle. Use a tape measure to identify the middle.



DATA SETTING

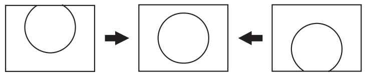
1. Set NTSC Full mode.
2. Enter the service mode, and select “PJE”.

2-12-2. MAIN DEFLECTION ADJUSTMENT

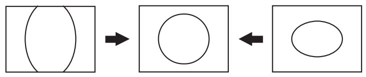
NOTE: Before this adjustment, refer to section 2-11 for PJE item #78-85 input data.

1. Cover the red and blue CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
2. Enter the monoscope signal and set to NTSC Full mode.
3. Enter the service mode, and select “2170D-1”.
4. Adjust “0 VPOS” and “1 VSIZ” so that the picture is displayed in the center of the screen.
5. Adjust “2VSZ0” for 1080i vertical size adjustment.

0 VPOS



1 V-Size

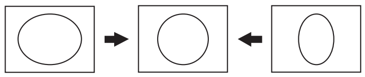


6. Select “2170D-2” and adjust “2 H-Size” so that the picture size is within the specification.

SPEC Overscan Spec. = 9%

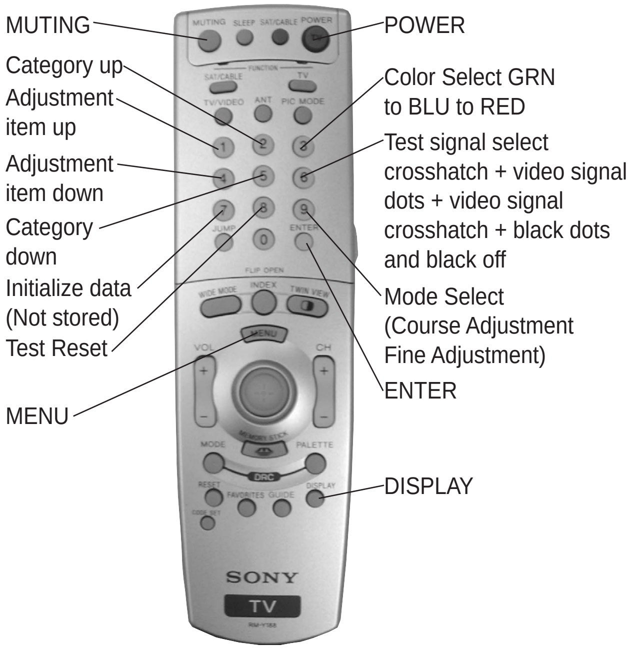
Input Signal	H SIZE	V SIZE
Monoscope	15.6 ± 0.2 sq.	11.5 ± 0.2 sq.

2 H-Size



7. Copy the data of the NTSC Full mode to the other wide screen mode and, if necessary, adjust in the other mode.

2-12-3.OPERATION METHOD FOR PROJECTOR ENGINE MODE


MUTING
Category up
Adjustment item up
Adjustment item down
Category down
Initialize data (Not stored)
Test Reset
MENU
POWER
Color Select GRN to BLU to RED
Test signal select crosshatch + video signal dots + video signal crosshatch + black dots and black off
Mode Select (Course Adjustment Fine Adjustment)
ENTER
DISPLAY

RM-Y188

1. FUNCTION OF KEYS ON COMMANDER

1	Changes adjustment item. (Item # moves up) Marker moves clockwise from center to outside. (In Fine Adjustment mode)
4	Changes adjustment item. (Item # moves down) Marker moves counter clockwise from outside to center. (In Fine Adjustment mode)
2	Changes adjustment category. (Category # moves up)
5	Changes adjustment category. (Category # moves down)
Joystick	Changes data value. (Up or down) Marker moves clockwise from center (up, down, right, and then left) to outside. (In Fine Adjustment mode)
3	Changes adjustment color. GRN →BLU →RED
6	Displays or changes internal test signals. crosshatch + external signal → crosshatch + borderline → crosshatch only → dot only → off
9	Switches adjustment mode. Coarse adjustment model → Fine adjustment mode
Press	Switches marker moving method.
Joystick	(In Fine Adjustment mode)

Pressing down on the joystick in Fine Adjustment mode switches between selecting and un-selecting a point.

When a point is selected, the cursor changes to that color to indicate the point is selected and can be adjusted. If a point is not selected the cursor is white.

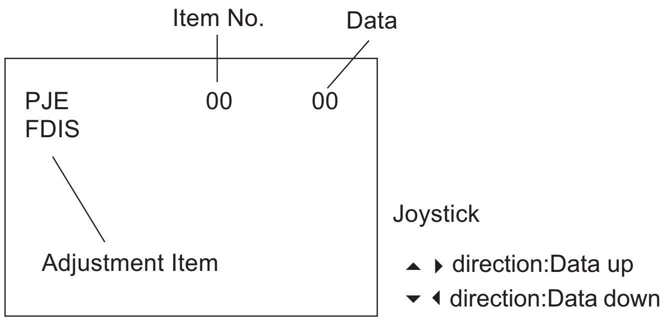
Joystick ▲ ▼ ◀ ▶ keys → **1** and **4** buttons

Commander Function

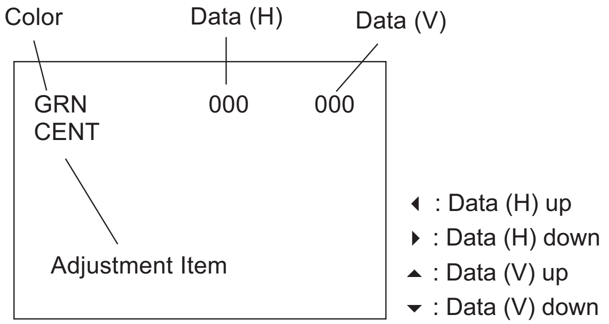
Buttons	Mode	Description
0 + ENTER	READ	Reads data to NVM.
MUTING+ENTER	WRITE	Writes data from NVM.
7 + ENTER	PJE INITIAL	Service data initialization. Not stored. (Be sure not to use usually)

2. OPERATION METHOD FOR COARSE ADJUSTMENT

1. Enter the service mode and select “PJE”.
2. Press the “1” or “4” button on the remote commander to select the item, and then use the joystick to change the data.


Item No.
Data
PJE
FDIS
00
00
Adjustment Item
Joystick
▲ ▶ direction:Data up
▼ ◀ direction:Data down

3. Select “GRN CENT”. When BLU or RED is displayed, press the “3” button on the remote commander to change the adjustment color in the order of GRN →BLU →RED.
4. In the GRN, BLU, or RED mode, move the joystick ▲ or ▼ to change the data in vertical direction, or ◀ or ▶ to change the data in a horizontal direction.

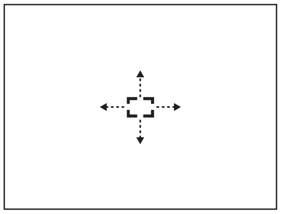

Color
Data (H)
Data (V)
GRN
CENT
000
000
Adjustment Item
◀ : Data (H) up
▶ : Data (H) down
▲ : Data (V) up
▼ : Data (V) down

5. Before returning to the service mode, press the “MUTING” + “ENTER” buttons on the remote commander to write the data. (You must complete step 5 to write the data. If you omit step 5 the set data is returned to the data prior to the adjustment.)

3. OPERATION METHOD FOR FINE ADJUSTMENT

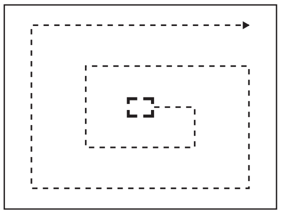
1. Enter the service mode and select "PJE".
2. Select FDIS and set the data to "01" so that the data at each position can be displayed in fine adjustment mode.
3. Press the "9" button on the remote commander and fine adjustment mode will be active where a green marker appears in the center of the screen. (In the case of GRN mode)
4. Press down on the joystick, and the marker color will be alternately switched between green (GRN mode) and white.
5. Press the "1" or "4" button on the remote commander or use the joystick to move the marker to the position to be adjusted, where fine adjustment can be made.

* When the marker color is white:
(in this case, fine adjustment is disabled)



Use the joystick to move the marker up, down, left, or right.

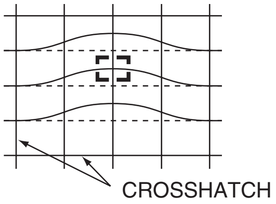
* When the marker color is green:
(GRN mode)



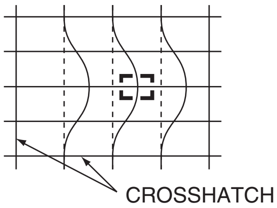
1 : Moves the marker clockwise from the center to the outside.
4 : Moves the marker counter clockwise from the outside to the center.

* Fine adjustment can be made on the basis of a marker position using the joystick to move ▲ ▼ ◀ or ▶.

Move joystick ▲ direction



Move joystick ▶ direction



6. Press the "9" button on the remote commander to return to the coarse adjustment mode.

2-13. PJE ADJUSTMENT (SUB DEFLECTION ADJUSTMENT)

Adjustment item	Adjustment type		
	G	R	B
	H/V*	H/V*	H/V*
CENT	O/O	O/O	O/O
SKEW	O/O	O/O	O/O
SIZE	O/O	O/O	O/O
LIN	O/O	O/O	O/O
KEY	-/O	-/O	-/O
PIN	O/O	O/O	O/O
MLIN	O/-	O/-	O/-
MSIZ	O/-	O/-	O/-

* H = Horizontal V = Vertical O = Yes - = No

Note: If the value is over the limit value, adjust these in the fine adjustment.

Coarse Data Limit Value:

CENT H	-135 TO + 205
CENT V	-150 TO + 190
SKEW	-75 TO + 75
SIZE H	-75 MAX
BLUE H LIN	-425 MIN
RED H LIN	+425 MAX
FINE DATA LIMIT Except the extreme left & right outside columns which have no limit	± 107

2-13-1.ADJUSTMENT FOR NTSC FULL MODE

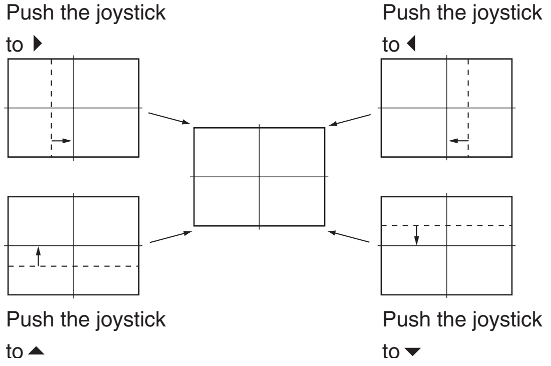
- The adjustment should be done in the numerical order given.

1) GREEN ADJUSTMENT

1. Cover the red and blue CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
2. Enter the monoscope signal to set.
3. Select the PJE mode.
4. Press the “6” button on the remote commander to display the internal test signal (crosshatch).
5. Select “GRN CENT”, and adjust so that the pictures coincide in the center of screen.

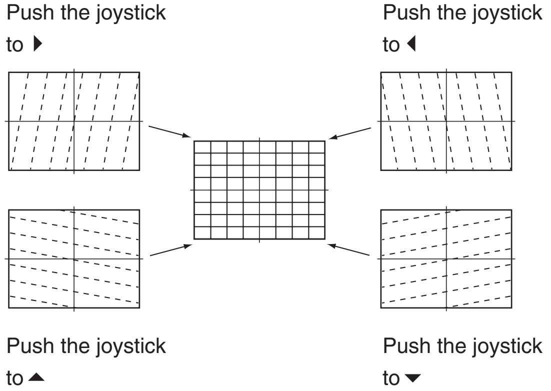
Note: If lens caps are unavailable, you can cut off the unnecessary color beams by controlling the service mode 2170P-2 1 RGBS.

GRN CENT (Horizontally/Vertically)


Push the joystick to ▶
Push the joystick to ◀
Push the joystick to ▲
Push the joystick to ▼

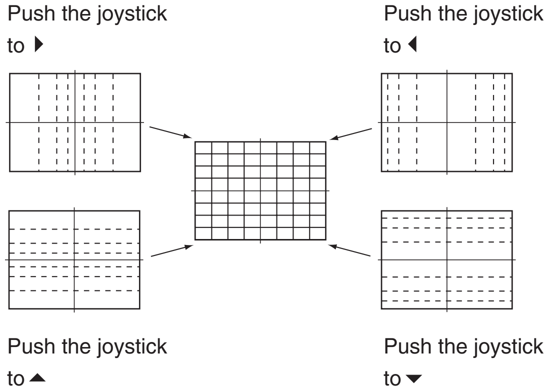
7. Select “GRN SKEW”, and correct the tilt of horizontal lines and vertical lines.

GRN SKEW (Horizontally/Vertically)


Push the joystick to ▶
Push the joystick to ◀
Push the joystick to ▲
Push the joystick to ▼

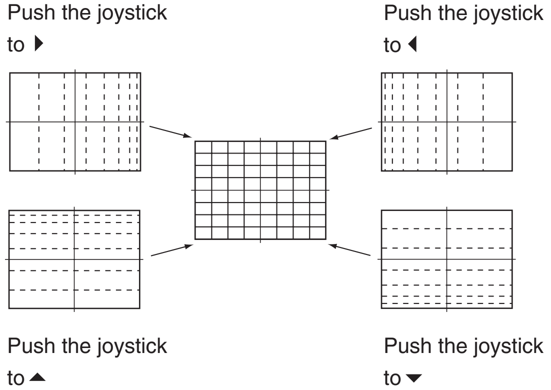
8. Select “GRN SIZE”, and adjust so that each distance from center to left end and to right end is equal. Adjust so that each distance from center to top and to bottom is equal.

GRN SIZE (Horizontally/Vertically)


Push the joystick to ▶
Push the joystick to ◀
Push the joystick to ▲
Push the joystick to ▼

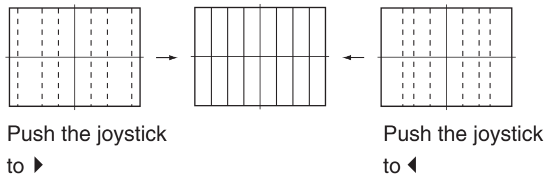
9. Select “GRN LIN”, and adjust so that each space at the right end and at the left end of screen is equal. Adjust so that each space at the top and at the bottom of screen is equal.

GRN LIN (Horizontally/Vertically)


Push the joystick to ▶
Push the joystick to ◀
Push the joystick to ▲
Push the joystick to ▼

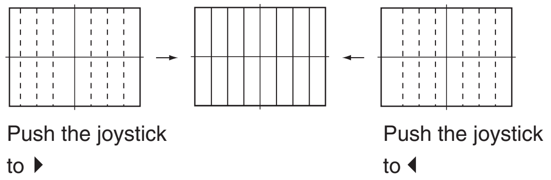
10. Select “GRN MSIZ”, and correct the space intervals for the horizontal section so the screen is equal.

GRN MSIZ (Horizontally)


Push the joystick to ▶
Push the joystick to ◀

11. Select “GRN MLIN”, and correct the sizes of the horizontal line so the center of the screen is symmetrical left and right.

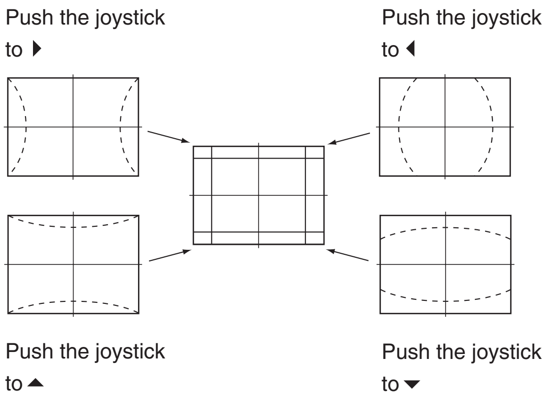
GRN MLIN (Horizontally)


Push the joystick to ▶
Push the joystick to ◀

Note: The SIZE and LIN, MSIZ and MLIN adjustments affect each other. If necessary, adjust these mutually.

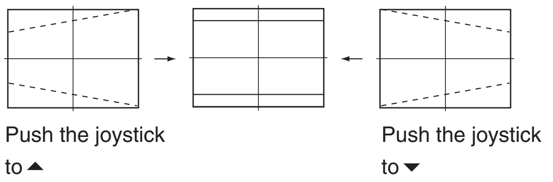
12. Select “GRN PIN”, and adjust so that right and left vertical lines on the screen become straight. Adjust so that upper and lower horizontal lines on the screen become straight.

GRN PIN (Horizontally/Vertically)



13. Select “GRN KEY”, and adjust so that upper and lower horizontal lines on the screen become parallel.

GRN KEY (Vertically)



Note: The VPIN and KEY adjustments affect each other.
If necessary, adjust these mutually.

14. Press the “9” button on the remote commander to enter fine adjustment mode.
15. Make the fine adjustment so that horizontal lines and vertical lines become straight.
16. Press the “9” button on the remote commander to return to coarse adjustment mode.

2) RED ADJUSTMENT

1. Cover the blue CRT lens with a lens caps to allow only the green and red to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
2. Press the “3” button on the remote commander to select RED mode.
3. Adjust the following items so that red lines overlap with green lines.
   - RED CENT (horizontally/vertically)
   - RED SKEW (horizontally/vertically)
   - RED SIZE (horizontally/vertically)
   - RED LIN (horizontally/vertically)
   - RED MSIZ (horizontally)
   - RED MLIN (horizontally)
   - RED PIN (horizontally/vertically)
   - RED KEY (vertically)
4. Press the “9” button on the remote commander to enter fine adjustment mode.
5. Make the fine adjustment so that horizontal lines and vertical lines overlap with green lines.
6. Press the “9” button on the remote commander to return to coarse adjustment mode.

Note: If lens caps are unavailable, you can cut off the unnecessary color beams by controlling the service mode 2170P-2 1 RGBS.

3) BLUE ADJUSTMENT

1. Remove the lens cap from the blue picture lens to display all colors.
2. Press the “3” button on the remote commander to select BLU mode.
3. Adjust the following items so that blue lines overlap with green lines.
   - BLU CENT (horizontally/vertically)
   - BLU SKEW (horizontally/vertically)
   - BLU SIZE (horizontally/vertically)
   - BLU LIN (horizontally/vertically)
   - BLU PIN (horizontally/vertically)
   - BLU KEY (vertically)
4. Press the “9” button on the remote commander to enter fine adjustment mode.
5. Make the fine adjustment so that horizontal lines and vertical lines overlap with green and red lines.
6. Press the “9” button on the remote commander to return `to coarse adjustment mode.

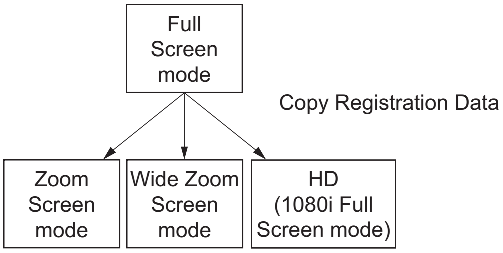
Note: When replacing CRTs, adjust the set-up adjustments (2-1 to 2-9) and the registration adjustment (2-12). When replacing multiple CRTs at the same time, replace and adjust them individually.

4) REGISTRATION DATA WRITING

1. After completing each adjustment of green, blue, and red for the NTSC Full mode press the “MUTING”+ “ENTER” buttons on the remote commander to write the registration data to the NVM.

2-13-2.COPYING ALL REGISTRATION DATA TO OTHER MODES

1. Make sure that the adjustment for NTSC Full mode are complete and the data have already been written.
2. Select the PJE mode.
3. Select ALCP and set the data to “01”, and press the “MUTING”+“ENTER” buttons on the remote commander.
4. The data from the NTSC Full mode is copied to all other modes.



5. Check in the other modes and adjust as demands.
   Be sure to write data in each mode.

2-14. AUTO REGISTRATION OFFSETS

IMPORTANT
This adjustment must be performed after registration adjustment or after readjustment for any reason!

Once registration in all modes is satisfactory:

1. Darken the room environment near the set.
2. Enter service mode and individually write data (“MUTING” + “ENTER”) for:
    - Full
    - Zoom
    - Wide Zoom
    - 1080i

Important:

You must complete step 2 even if registration looks OK in these modes and there were not any adjustments made.

Note: If 1080i source is not available, 1080i data can be displayed by entering Twin Mode.

3. Select input of RF (with a signal) or Video1 - Video4 (with a signal), and enter Full Mode.

    WARNING: DO NOT USE 1080i SIGNAL!
4. From service mode, select the PJE group.
5. To automatically store the offset values, press the “FLASH FOCUS” button on the front panel of the set.

    (The offset value is now stored)

    If FLASH FOCUS successfully calibrates, it displays “CALIBRATION OK.”
    If FLASH FOCUS does not successfully calibrate, an error message is displayed.(Refer to section 2-15)
6. Exit the service mode.
7. If the calibration was successful, press the “FLASH FOCUS” button out of service mode.
8. Confirm registration is OK in all modes.

2-15.AUTO REGISTRATION ERROR CODES

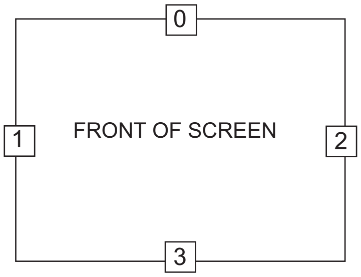
If an error code is displayed after the set has been correctly adjusted, check the following items: position, tilt and sizing. If any of these adjustments are off, even slightly, the auto-registration pattern will not hit the four sensors properly. This occurs when the internal generator patterns are being flashed on the screen for the sensors to read. Therefore, auto registration (called auto convergence) cannot operate properly, causing an error code to be displayed. In order for this function to operate properly, position, tilt and size must be adjusted properly.

ERROR CODE LIST

ERROR CODE	DESCRIPTION	NOTE
00	No Error	
10	Sensor 0 low output	Check sensor 0, connection/wiring, circuit, and pattern position (are patterns hitting sensor?) adjust 66 VUP, 70 HMID if necessary.
11	Sensor 1 low output	Check sensor 1, connection/wiring, circuit, and pattern position (are patterns hitting sensor?) adjust 69 HLE, 67 VMID if necessary.
12	Sensor 2 low output	Check sensor 2, connection/wiring, circuit, and pattern position (are patterns hitting sensor?) adjust 71 HRIV, 67 VMID if necessary.
13	Sensor 3 low output	Check sensor 3, connection/wiring, circuit, and pattern position (are patterns hitting sensor?) adjust 68 VLOW, 70 HMID if necessary.
20	Sensor 0 high output	Check sensor 0 and circuit.
21	Sensor 1 high output	Check sensor 1 and circuit.
22	Sensor 2 high output	Check sensor 2 and circuit.
23	Sensor 3 high output	Check sensor 3 and circuit.
30	V CENT or SKEW adjustment loop overflow	Check 67 VMID data and check registration condition.
31	H CENT or SKEW adjustment loop overflow	Check 70 HMID data and check registration condition.
32	H LIN or SIZE adjustment loop overflow	Check 69 HLE and 71 HRIV data and check registration condition.
40	V CENT regi data overflow	Check 67 VMID data and confirm V CENT data (all modes) is not near 511.
41	H CENT regi data overflow	Check 70 HMID data and confirm H CENT data (all modes) is not near 511.
42	V SKEW regi data overflow	Check 67 VMID data and confirm V SKEW data (all modes) is not near 511.
43	H SKEW regi data overflow	Check 70 HMID data and confirm H SKEW data (all modes) is not near 511.
44	H LIN regi data overflow	Check 69 HLE and 71 HRIV data and confirm H CENT data (all modes) is not near 511.
45	H SIZE regi data overflow	Check 69 HLE and 71 HRIV data and confirm H CENT data (all modes) is not near 511.
50	V CENT regi data overdrow	Check 67 VMID data and confirm V CENT data (all modes) is not near -512.
51	H CENT regi data overdrow	Check 70 HMID data and confirm H CENT data (all modes) is not near -512.
52	V SKEW regi data overdrow	Check 67 VMID data and confirm V SKEW data (all modes) is not near -512.
53	H SKEW regi data overdrow	Check 70 HMID data and confirm H SKEW data (all modes) is not near -512.
54	H LIN regi data overdrow	Check 69 HLE and 71 HRIV data and confirm H CENT data (all modes) is not near -512.
55	H SIZE regi data overdrow	Check 69 HLE and 71 HRIV data and confirm V CENT data (all modes) is not near -512.
60	CENT/SKEW calibration loop overflow	Check 70 HMID and 67 VMID data and check registration condition.
61	SIZE/LIN calibration loop overflow	Check 69 HLE, 71 HRIV, 66 VUP, and 68 VLOW data and check registration condition.
70	V CENT/SKEW ratio limit	Check sensors 1 and 2, connection/wiring, circuit, increase 65 RTLM.
71	H CENT/SKEW ratio limit	Check sensors 0 and 3, connection/wiring, circuit, increase 65 RTLM.
73	H SIZE/Lin ratio limit	Check sensors 1 and 2, connection/wiring, circuit, increase 65 RTLM.
80	SIZE Limit Error	Check that horizontal SIZE data is not near 64 SZLM.

* In the case of multiple errors, last error is displayed.

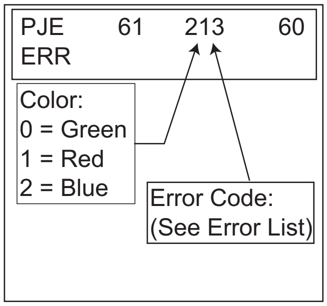
SENSOR POSITIONS



0: UPPER SENSOR
1: LEFT SENSOR
2: RIGHT SENSOR
3: LOWER SENSOR

• ERROR CODE SCREEN DISPLAY

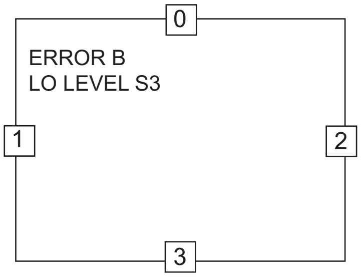
Error codes in normal (customer) mode are not displayed. You must enter PJE service mode to see the error code.



```
PJE      61      213      60
ERR
```

(Blue Sensor 3 Low Output)

In service mode, the error will be displayed in text format.



```
ERROR B
LO LEVEL S3
```

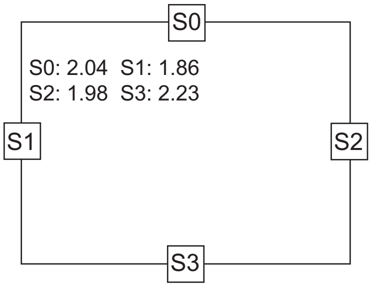
2-16.AUTO REGISTRATION DIAGNOSTICS

The TEST service item (PJE #72) can be used to determine if a sensor or sensor amplifier is working properly. It can also be used to check pattern positions.

133

Color: 0=Green, 1=Red, 2=Blue, 3=All
CS/ZL: 0=None, 1=Cent/Skew, 2=siZe/Lin, 3=Both
Display/Loop: 0=Display, 1:Loop

DISPLAY/ LOOP	CS/ZL	COLOR	ACTION
(0)	0	0	Normal calibration (no diagnostics).
(0)	X	X	Performs one adjustment cycle, then displays average peak voltages for the specified CS/ZL and Color.
(0)	3	3	Does nothing (can't display more than one CS/ZL or Color at a time.)
1	X	X	Adjusts specified CS/ZL and Color until a key is pressed. Useful for measuring signals with oscilloscope.



```
S0: 2.04  S1: 1.86
S2: 1.98  S3: 2.23
```

Sensor 0 peak voltage = 2.04 V, etc.

SECTION 3: SAFETY-RELATED ADJUSTMENTS

D BOARD

3-1. HV REGULATION CIRCUIT CHECK AND ADJUSTMENT

When replacing the following components marked with a ◪ on the schematic diagram always check the HV regulation, and if necessary re-adjust.

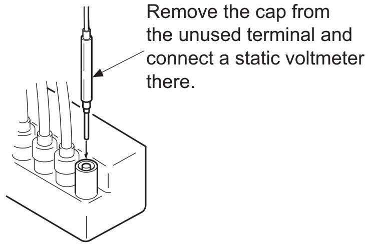
Part Replaced (◪)	Adjustment (⧓)
A BOARD: HV Block, T8005 (FBT), T8004 (LOT), R8129, D8038, R8128, C8129, R8223, R8102, R8230, R8055, R8153, C8083, R8139, C8079, D8051, D8013, R8140, D8043, R8163, C8090, D8015. R8142, R8131, Q8021, IC8006, D Board	**HV REGULATOR** VR8001

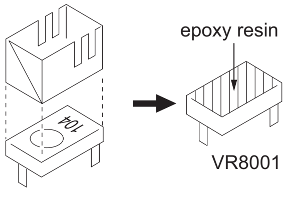
OPERATION CHECK

1. Receive the all white signal.
2. Set PIC MAX/BRT CENT.
3. Confirm that the voltage between CN8015 ① PIN and GND is less than 7.80VDC.

HV REGULATION ADJUSTMENT

1. Connect a HV static voltmeter to the unconnected plug of the high-voltage block.
2. Power on the set.
3. Repeat steps 1 and 2 as above.
4. Confirm that the static voltmeter reading is 31.0 ± 0.4V.
5. If not, adjust with VR8001 to the specified value.
6. After adjustment, put the VR cover on VR8001 (as shown below) and apply sufficient amount of epoxy resin around VR8001.





3-2. HV HOLD DOWN CIRCUIT OPERATION CHECK AND ADJUSTMENT

When replacing the following components marked with a ◪ on the schematic diagram always check the hold-down voltage and re-adjust when necessary.

Part Replaced (◪)	Adjustment (⧓)
A BOARD: HV Block, T8005 (FBT), T8004 (LOT), C8123, C8124, Q8043, Q8035, C8104, R8171, D8036, R8043, R8035, C8088, C8086, R8159, D8022, C8054, R8166, C8100, IC8008, D8019, D8020, R8201, C8118, D8028, R8196, FB8001, D Board	**HV HOLD DOWN** VR8002

OPERATION CHECK

1. Receive the dot signal.
2. Set PIC MIN/BRT MIN.
3. Confirm that the voltage between cathode of D8038 (JW171) and GND is more than 23.0V DC.
4. Using an external DC Power supply, apply the voltage shown below between cathode of D8038 (JW171) on "D" and GND, then confirm that the HV-Prot circuit works. (Raster disappears)

   Apply DC voltage: Less than 29.05V DC.

HV HOLD-DOWN ADJUSTMENT

1. Connect a HV static voltmeter to the unconnected plug of the high-voltage block.
2. Power on the set.
3. Connect an external 10kΩ VR at CN8015 and adjust this VR so that the high voltage is 34.50kV.
4. Adjust VR8002 to the point that the HV-Prot circuit works (Raster disappears) at 34.50 ± 0.50kV reading on the static voltmeter.
5. After adjustment, put the VR cover on VR8002 and apply sufficient amount of epoxy resin around VR8002 as the same manner for VR8001.

G BOARD

3-3. +B MAX VOLTAGE CONFIRMATION

The following adjustments should always be performed when replacing IC6503 R6518.

1. Supply 130VAC to variable autotransformer.
2. Receive dot signal pattern and set the PICTURE and BRIGHTNESS settings to their minimum.
3. Confirm the voltage of TP +B 135V is less than 137.0Vdc.
4. If step 3 is not satisfied, replace IC6503 and repeat steps 1-3.

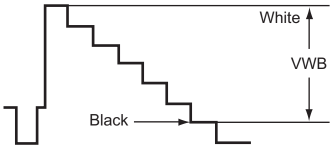
3-4. +B OVP CONFIRMATION

1. Add to low voltage power supply between to TP. 6502 and ground.
2. Supply 120VAC to variable autotransformer.
3. Power on the Set and receive dot signal pattern.
4. Set the PICTURE and BRIGHTNESS settings.
5. Check the OVP is activated.
   Operate :less than 2.50V

SECTION 4: CIRCUIT ADJUSTMENTS

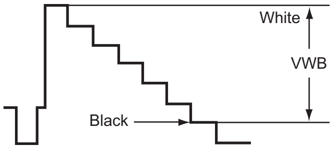
4-1. P &P SUB CONTRAST ADJUSTMENT (VIDEO) (SCON)

1. Receive the signal.
   VIDEO 1 terminal Composite: Color-bar (white-75%, 7.5% setup)
2. VIDEO MODE : Pro
   PICTURE : Maximum
   COLOR : Minimum
   2170P2 1 RGB : 2
3. Set to P & P mode, and receive the color bars in both main and sub (left and right), and set to service mode.
4. Connect an oscilloscope between the check point and ground.
   Check points : CN13 pin C20 (Main)
   : CN13 pin A19 (Sub)
5. Select "2103-1-02" (Main scon), and adjust so that the waveform level of VWB is 1.86 ± 0.03Vp-p.
6. Select "2103-2-02" (Sub scon), and adjust so that the waveform level of VWB is 1.86 ± 0.03Vp-p.
7. Write the data into memory.
   "MUTING" → "ENTER"



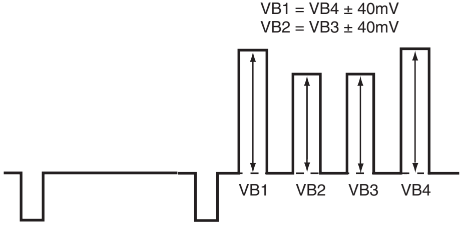
4-2. P & P SUB CONTRAST ADJUSTMENT (RF) (SCON)

1. Receive the signal.
   TV terminal RF : Color-bar (white-75%, 7.5% setup)
2. VIDEO MODE : Pro
   PICTURE : Maximum
   COLOR : Minimum
   2170P2 1 RGB : 2
3. Set to P & P mode, and receive the color bars in both main and sub (left and right), and set to service mode.
4. Connect an oscilloscope between the check point and ground.
   Check points : CN13 pin C20 (Main)
   : CN13 pin A19 (Sub)
5. Select "2103-1-02" (Main scon), and adjust so that the waveform level of VWB is 1.86 ± 0.03Vp-p.
6. Select "2103-2-02" (Sub scon), and adjust so that the waveform level of VWB is 1.86 ± 0.03Vp-p.
7. Write the data into memory.
   "MUTING" → "ENTER"



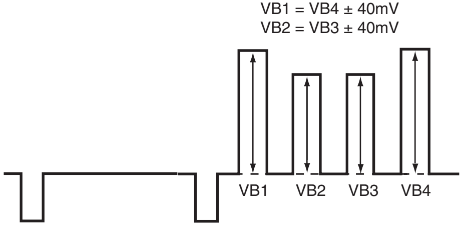
4-3. P & P SUB-HUE AND SUB-COLOR ADJUSTMENT VIDEO (SHUE, SCOL)

1. Receive the signal.
   VIDEO 1 terminal Composite: Color-bar (white-75%, 7.5% setup)
2. VIDEO MODE : Pro
   PICTURE : Maximum
   COLOR : Center
   RGB : 7
3. Set to P & P mode, and receive the color bars in both main and sub (left and right), set to service mode.
4. Connect an oscilloscope between pin ③ of CN702 (A board) connector and ground.
5. Select "2103-1-03 SCOL, -04 SHUE" (Main), and adjust them to have VB1 ≤ VB4 and VB2 ≤ VB3 in the waveform levels.
6. Select "2103-2-03 SCOL, -04 SHUE" (Sub), and adjust them to have VB1 ≤ VB4 and VB2 ≤ VB3 in the waveform levels.
7. Write the data into memory.
   "MUTING" → "ENTER"



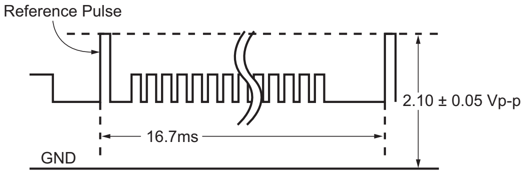
4-4. P & P SUB-HUE AND SUB-COLOR ADJUSTMENT (RF) (SHUE, SCOL)

1. Receive the signal.
   TV terminal : Color-bar (white-75%, 7.5% setup)
2. VIDEO MODE : Pro
   PICTURE : Maximum
   COLOR : Center
   RGB : 7
3. Set to P & P mode, and receive the color bars in both main and sub (left and right), set to service mode.
4. Connect an oscilloscope between pin ③ of CN702 (A board) connector and ground.
5. Select "2103-1-03 SCOL, -04 SHUE" (Main), and adjust them to have VB1 ≤ VB4 and VB2 ≤ VB3 in the waveform levels.
6. Select "2103-2-03 SCOL, -04 SHUE" (Sub), and adjust them to have VB1 ≤ VB4 and VB2 ≤ VB3 in the waveform levels.
7. Write the data into memory.
   "MUTING" → "ENTER"



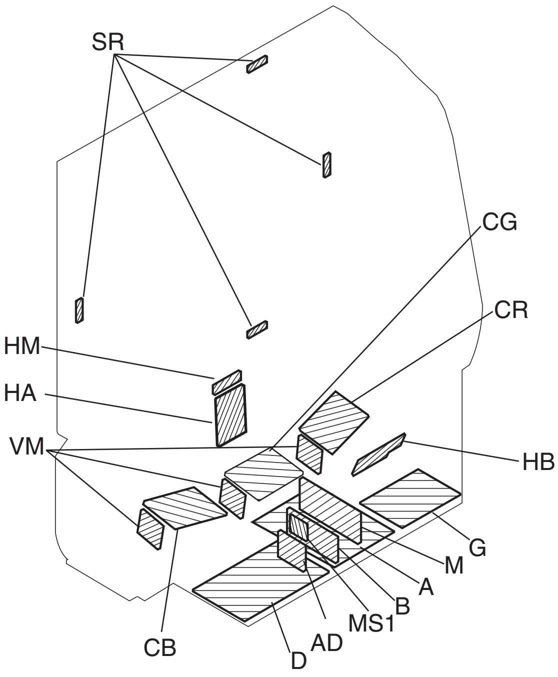
4-5. BLUE OFFSET ADJUSTMENT

1. Receive the all black (1080i, component) signal with VIDEO 5 input, and set PICTURE to maximum.
2. Connect an oscilloscope between CN507 ⑦ pin (B) on the (A board) and ground.
3. Set in the service mode and select the category "2170D-2".
4. Adjust "3 SLIN" so that the waveform level is 2.10 ± 0.05Vpp.
5. After completing the adjustments, write the data into memory.
   "MUTING" → "ENTER".
6. Receive the RF signal and change the wide screen mode to "Wide Zoom". Copy the same data to "3 SLIN".



SECTION 5: DIAGRAMS

5-1. CIRCUIT BOARDS LOCATION



5-2. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS INFORMATION

All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.

All electrolytics are in 50V unless otherwise specified.

All resistors are in ohms. K=1000, M=1000k

Indication of resistance, which does not have one for rating electrical power, is as follows: Pitch : 5mm
Rating electrical power : $^1/_4$ W

$^1/_4$ W in resistance, $^1/_{10}$ W and $^1/_8$ W in chip resistance.

▭ : nonflammable resistor.

▭ : fusible resistor.

Δ : internal component.

▭ : panel designation and adjustment for repair.

⊥ : earth ground

⏚ : earth-chassis

All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

Readings are taken with a NTSC color-bar signal input.

Readings are taken with a 10M digital multimeter.

Voltages are DC with respect to ground unless otherwise noted.

Voltage variations may be noted due to normal production tolerances.

All voltages are in V.

S : Measurement impossibillity.

▬ : B+ line

▬ ▬ : B-line. (Actual measured value may be different).

⇨ : signal path. (RF)

Circled numbers are waveform references.

The components identified by ⧓ in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be necessary, replace only with the value originally used.

When replacing components identified by ◪, make the necessary adjustments as indicated. If the results do not meet the specified value, change the component identified by ⧓ and repeat the adjustment until the specified value is achieved.

(Refer to adjustments in Sections 3-1 and 3-2.)

When replacing the parts listed in the table below, it is important to perform the related adjustments.

Part Replaced (◪)	Adjustment (⧓)
A BOARD: HV Block, T8005 (FBT), T8004 (LOT), R8129, D8038, R8128, C8129, R8223, R8102, R8230, R8055, R8153, C8083, R8139, C8079, D8051, D8013, R8140, D8043, R8163, C8090, D8015. R8142, R8131, Q8021, IC8006, D Board	**HV REGULATOR** VR8001
A BOARD: HV Block, T8005 (FBT), T8004 (LOT), C8123, C8124, Q8043, Q8035, C8104, R8171, D8036, R8043, R8035, C8088, C8086, R8159, D8022, C8054, R8166, C8100, IC8008, D8019, D8020, R8201, C8118, D8028, R8196, FB8001, D Board	**HV HOLD DOWN** VR8002

REFERENCE INFORMATION

RESISTOR	**: RN**	**METAL FILM**
	: RC	**SOLID**
	: FPRD	**NONFLAMMABLE CARBON**
	: FUSE	**NONFLAMMABLE FUSIBLE**
	: RW	**NONFLAMMABLE WIREWOUND**
	: RS	**NONFLAMMABLE METAL OXIDE**
	: RB	**NONFLAMMABLE CEMENT**
	: ※	**ADJUSTMENT RESISTOR**
COIL	**: LF-8L**	**MICRO INDUCTOR**
CAPACITOR	**: TA**	**TANTALUM**
	: PS	**STYROL**
	: PP	**POLYPROPYLENE**
	: PT	**MYLAR**
	: MPS	**METALIZED POLYESTER**
	: MPP	**METALIZED POLYPROPYLENE**
	: ALB	**BIPOLAR**
	: ALT	**HIGH TEMPERATURE**
	: ALR	**HIGH RIPPLE**

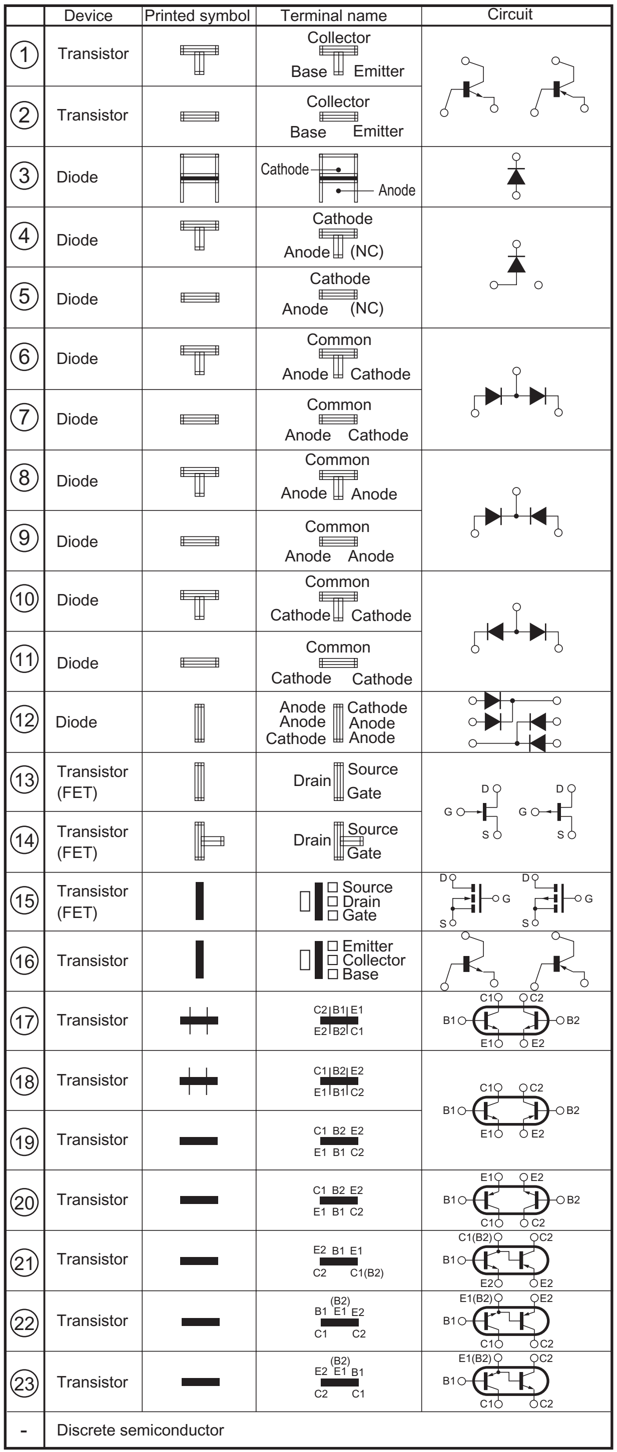
The components identified by shading and ⚠ symbol are critical for safety. Replace only with part number specified.

The symbol ▮▭▭ indicates a fast operating fuse and is displayed on the component side of the board. Replace only with fuse of the same rating as marked.

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

Le symbole ▮▭▭ indique une fusible a action rapide. Doit etre remplace par une fusible de meme yaleur, comme maque.

Terminal name of semiconductors in silk screen printed circuit (*)



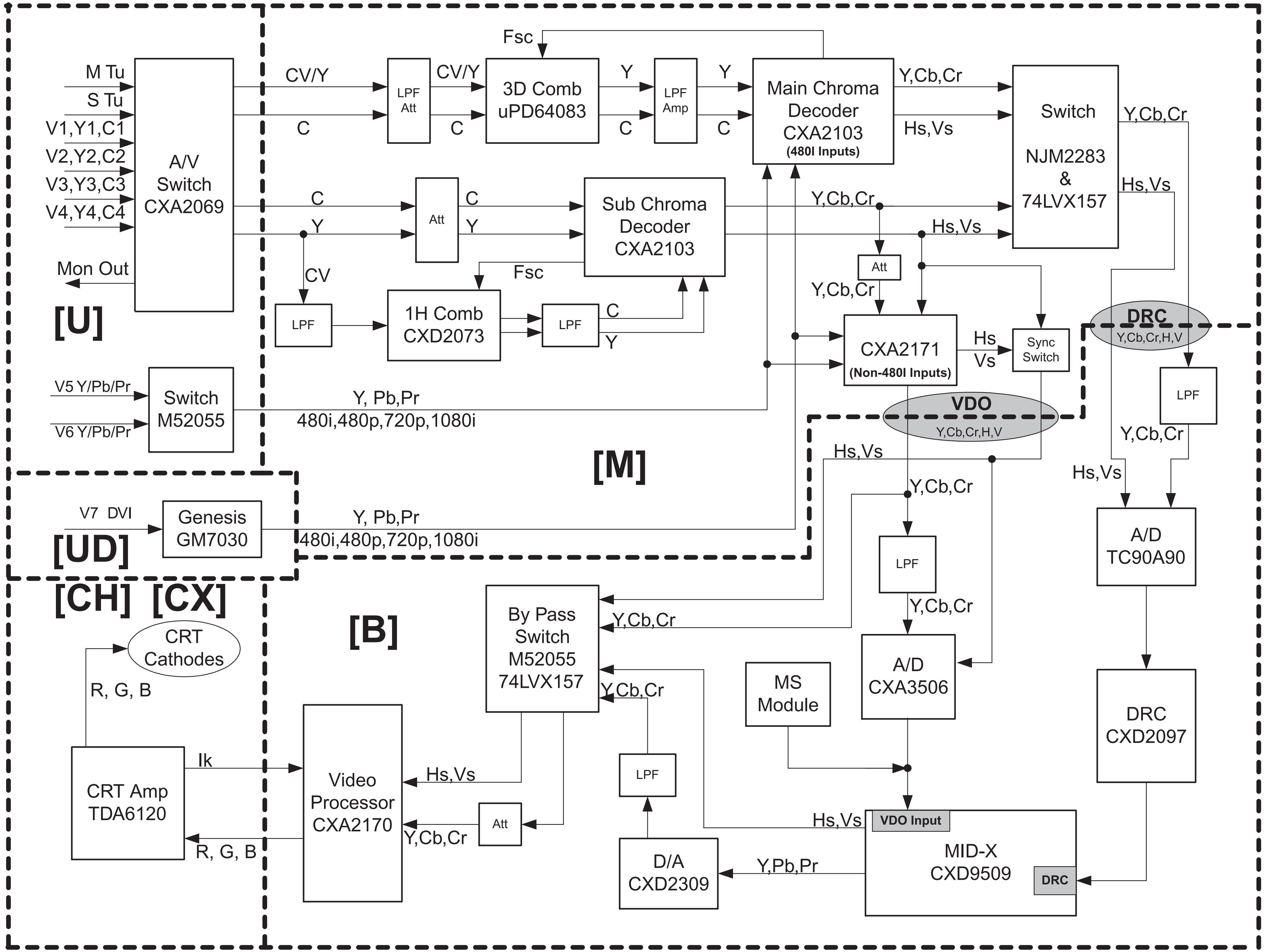
	Device	Printed symbol	Terminal name	Circuit
①	Transistor		Collector Base Emitter	
②	Transistor		Collector Base Emitter	
③	Diode		Cathode Anode	
④	Diode		Cathode Anode (NC)	
⑤	Diode		Cathode Anode (NC)	
⑥	Diode		Common Anode Cathode	
⑦	Diode		Common Anode Cathode	
⑧	Diode		Common Anode Anode	
⑨	Diode		Common Anode Anode	
⑩	Diode		Common Cathode Cathode	
⑪	Diode		Common Cathode Cathode	
⑫	Diode		Anode Cathode Anode Anode Cathode Anode	
⑬	Transistor (FET)		Drain Source Gate	D G S
⑭	Transistor (FET)		Drain Source Gate	
⑮	Transistor (FET)		☐ Source ☐ Drain ☐ Gate	D G S
⑯	Transistor		☐ Emitter ☐ Collector ☐ Base	
⑰	Transistor		C2 B1 E1 E2 B2 C1	C1 C2 B1 B2 E1 E2
⑱	Transistor		C1 B2 E2 E1 B1 C2	C1 C2 B1 B2 E1 E2
⑲	Transistor		C1 B2 E2 E1 B1 C2	
⑳	Transistor		C1 B2 E2 E1 B1 C2	E1 E2 B1 B2 C1 C2
㉑	Transistor		E2 B1 E1 C2 C1(B2)	C1(B2) C2 B1 E2 E2
㉒	Transistor		(B2) B1 E1 E2 C1 C2	E1(B2) E2 B1 C1 C2
㉓	Transistor		(B2) E2 E1 B1 C2 C1	E1(B2) C2 B1 C1 C2
-	Discrete semiconductor			

(Chip semiconductors that are not actually used are included.)

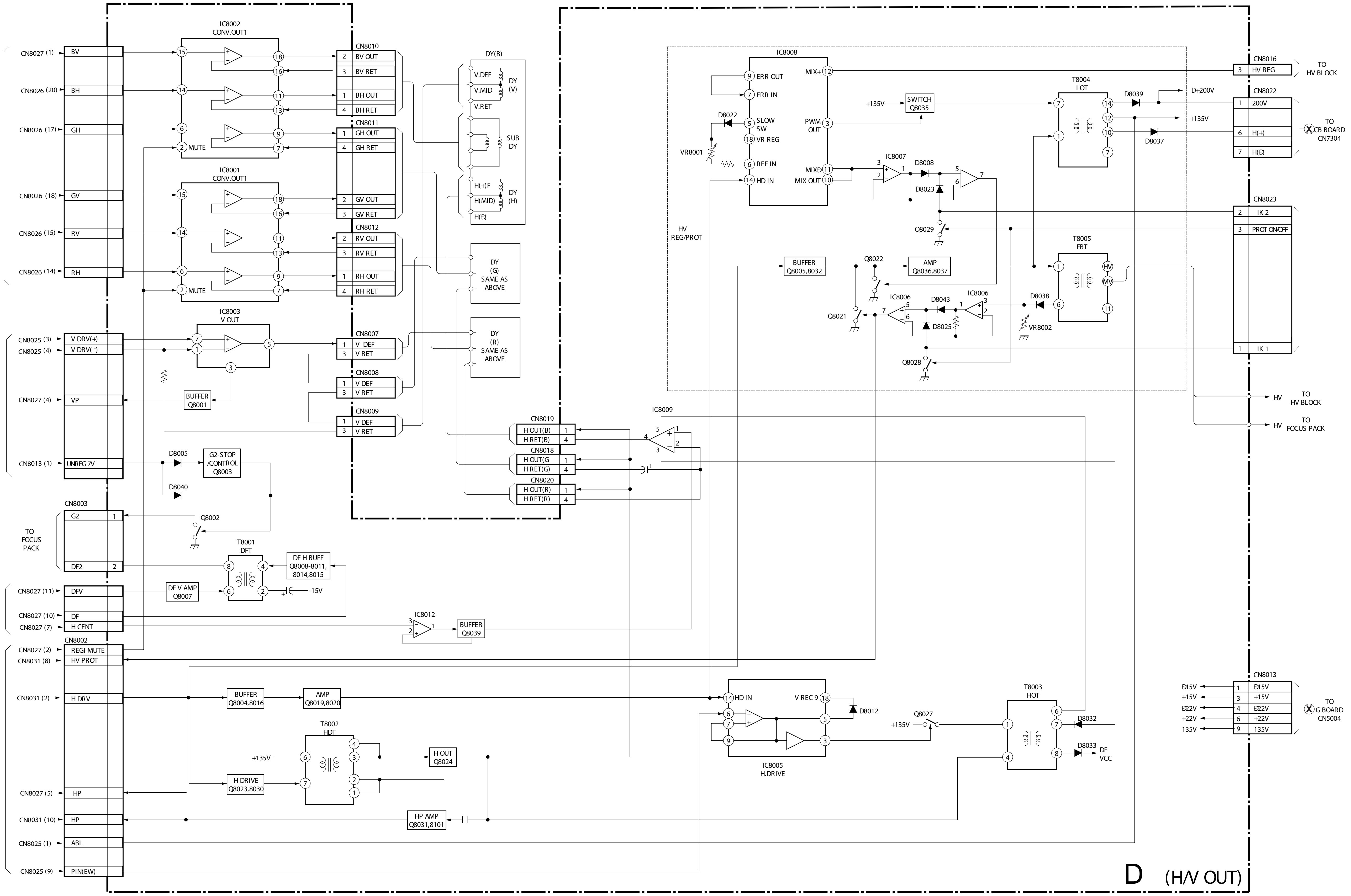
Ver.1.6

5-3. BLOCK DIAGRAMS

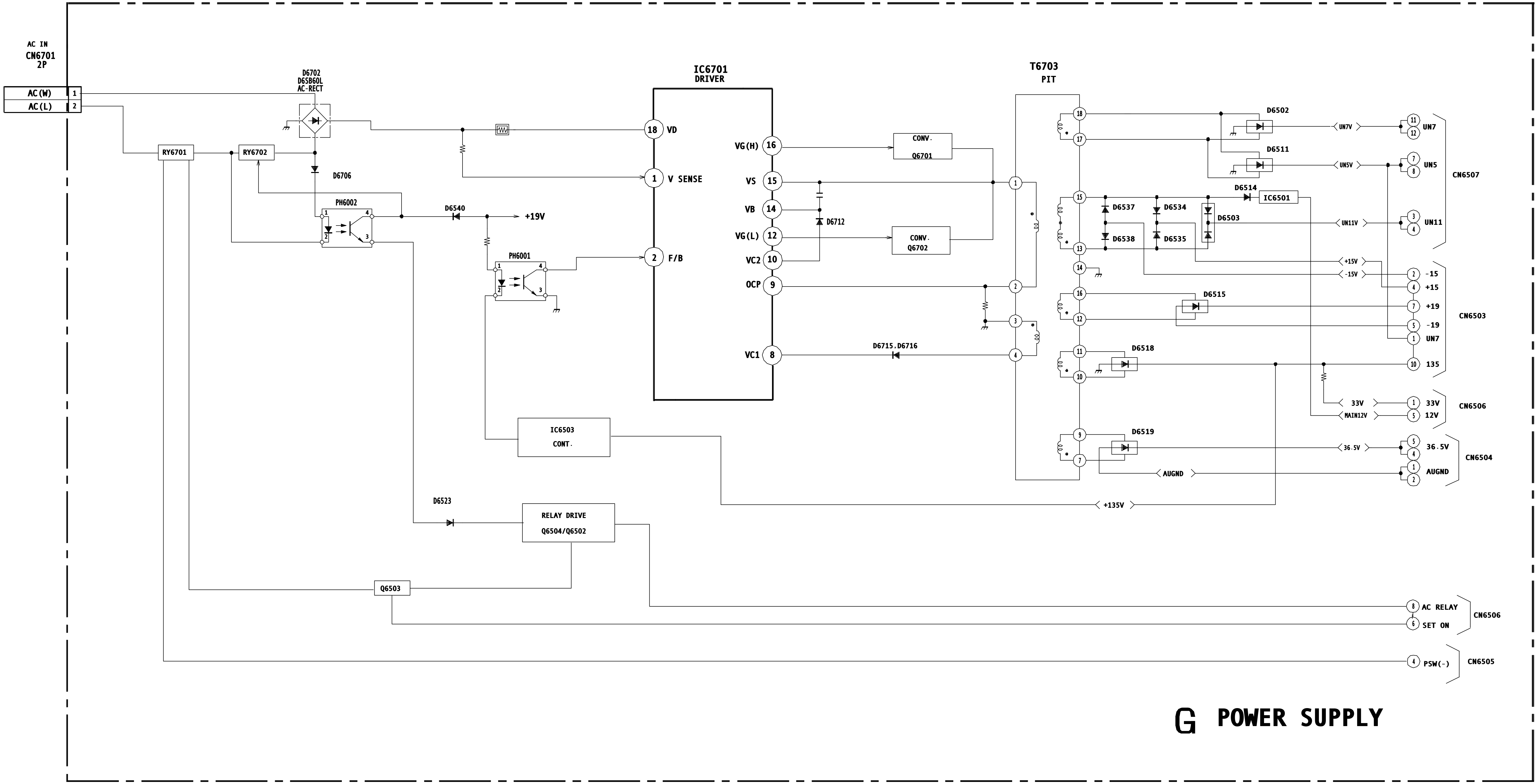
SIGNAL FLOW BLOCK DIAGRAM


M Tu
S Tu
V1,Y1,C1
V2,Y2,C2
V3,Y3,C3
V4,Y4,C4
A/V Switch CXA2069
Mon Out
[U]
CV/Y
C
Y
CV
LPF Att
CV/Y
3D Comb uPD64083
Fsc
Y
LPF Amp
Main Chroma Decoder CXA2103
(480I Inputs)
Y,Cb,Cr
Hs,Vs
Switch NJM2283 & 74LVX157
Att
Sub Chroma Decoder CXA2103
LPF
1H Comb CXD2073
Att
CXA2171
(Non-480I Inputs)
Hs
Vs
Sync Switch
DRC
Y,Cb,Cr,H,V
VDO
Y,Cb,Cr,H,V
LPF
V5 Y/Pb/Pr
V6 Y/Pb/Pr
Switch M52055
Y, Pb,Pr
480i,480p,720p,1080i
[M]
V7 DVI
Genesis GM7030
[UD]
[CH] [CX]
CRT Cathodes
R, G, B
CRT Amp TDA6120
Ik
Video Processor CXA2170
[B]
By Pass Switch M52055 74LVX157
A/D TC90A90
A/D CXA3506
MS Module
DRC CXD2097
D/A CXD2309
Y,Pb,Pr
VDO Input
MID-X CXD9509
DRC

DEFLECTION BLOCK DIAGRAM

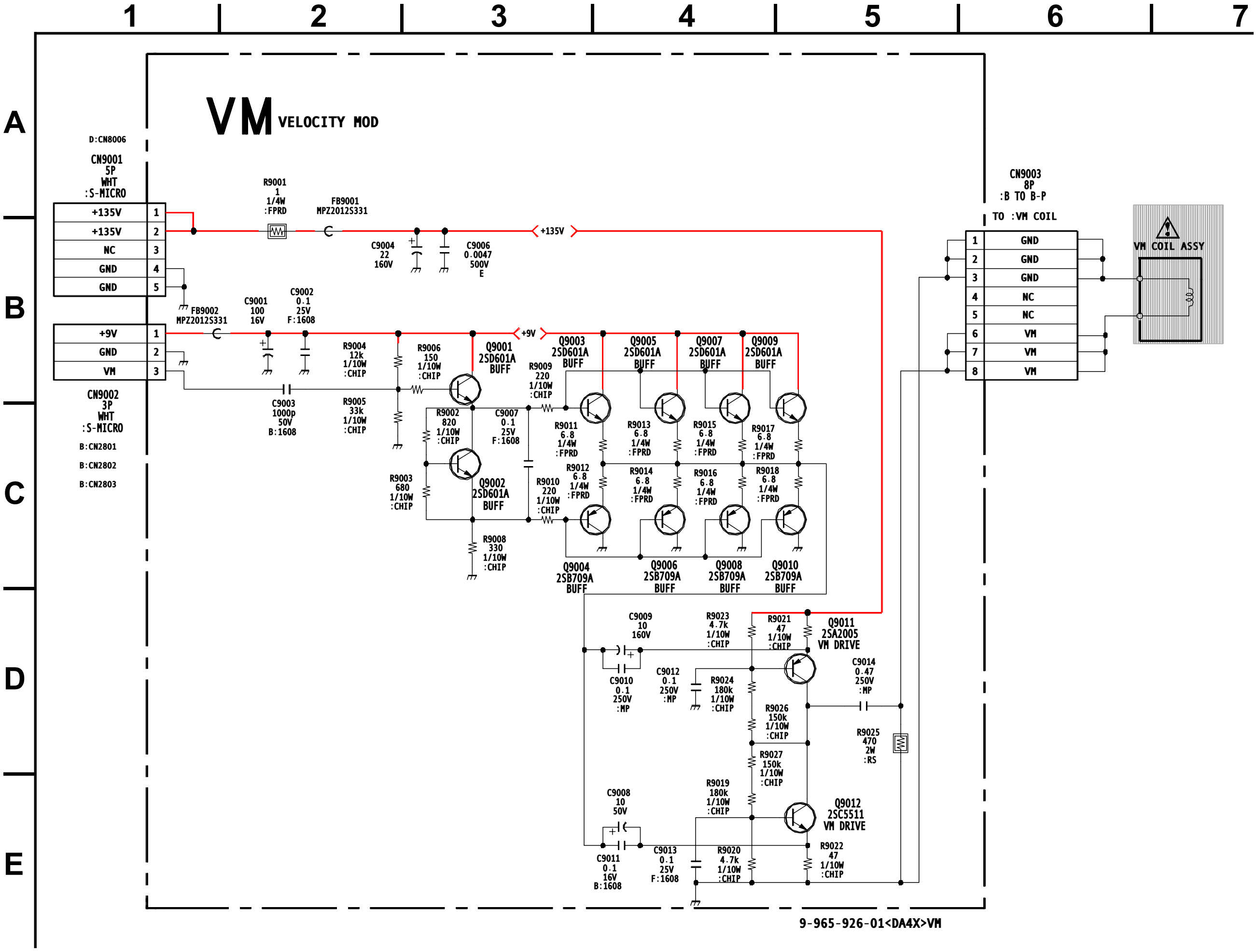

IC8002
CONV.OUT1
IC8001
CONV.OUT1
IC8003
V OUT
CN8027 (1) BV
CN8026 (20) BH
CN8026 (17) GH
CN8026 (18) GV
CN8026 (15) RV
CN8026 (14) RH
MUTE
CN8010
BV OUT
BV RET
BH OUT
BH RET
CN8011
GH OUT
GH RET
GV OUT
GV RET
CN8012
RV OUT
RV RET
RH OUT
RH RET
DY(B)
V.DEF
V.MID
V.RET
DY (V)
SUB DY
H(+)F
H(MID)
H(−)
DY (H)
DY (G) SAME AS ABOVE
DY (R) SAME AS ABOVE
CN8025 (3) V DRV(+)
CN8025 (4) V DRV(−)
CN8027 (4) VP
BUFFER Q8001
CN8007
V DEF
V RET
CN8008
CN8009
CN8013 (1) UNREG 7V
D8005
D8040
G2-STOP /CONTROL Q8003
CN8003
G2
DF2
TO FOCUS PACK
Q8002
T8001 DFT
DF H BUFF Q8008-8011, 8014,8015
DF V AMP Q8007
−15V
CN8027 (11) DFV
CN8027 (10) DF
CN8027 (7) H CENT
CN8002
CN8027 (2) REGI MUTE
CN8031 (8) HV PROT
CN8031 (2) H DRV
CN8027 (5) HP
CN8031 (10) HP
CN8025 (1) ABL
CN8025 (9) PIN(EW)
IC8012
BUFFER Q8039
CN8019
H OUT(B)
H RET(B)
CN8018
H OUT(G)
H RET(G)
CN8020
H OUT(R)
H RET(R)
IC8009
BUFFER Q8004,8016
AMP Q8019,8020
T8002 HDT
+135V
H DRIVE Q8023,8030
H OUT Q8024
HP AMP Q8031,8101
IC8008
ERR OUT
ERR IN
SLOW SW
VR REG
REF IN
HD IN
MIX+
PWM OUT
MIX−
MIX OUT
D8022
VR8001
HV REG/PROT
SWITCH Q8035
T8004 LOT
D8039
D+200V
D8037
+15V
IC8007
D8008
D8023
Q8029
BUFFER Q8005,8032
Q8022
AMP Q8036,8037
T8005 FBT
HV
MV
IC8006
D8043
D8025
D8038
VR8002
Q8021
Q8028
CN8016
HV REG
TO HV BLOCK
CN8022
200V
H(+)
H(−)
TO CB BOARD CN7304
CN8023
IK 2
PROT ON/OFF
IK 1
HV TO HV BLOCK
HV TO FOCUS PACK
IC8005 H.DRIVE
HD IN
V REC
D8012
Q8027
T8003 HOT
D8032
D8033
DF VCC
CN8013
−15V
+15V
−22V
+22V
135V
TO G BOARD CN5004
D (H/V OUT)

POWER SUPPLY BLOCK DIAGRAM


AC IN
CN6701
2P
AC(W) 1
AC(L) 2
D6702
D6SB60L
AC-RECT
RY6701
RY6702
D6706
PH6002
D6540
+19V
PH6001
IC6701
DRIVER
18 VD
1 V SENSE
2 F/B
VG(H) 16
VS 15
VB 14
VG(L) 12
VC2 10
OCP 9
VC1 8
CONV.
Q6701
CONV.
Q6702
D6712
D6715,D6716
T6703
PIT
D6502
D6511
D6514
IC6501
D6537
D6534
D6503
D6538
D6535
D6515
D6518
D6519
UN7V
UN5V
UN11V
+15V
-15V
33V
MAIN12V
36.5V
AUGND
UN7
UN5
UN11
CN6507
-15
+15
+19
-19
UN7
135
CN6503
33V
12V
CN6506
36.5V
AUGND
CN6504
IC6503
CONT.
+135V
D6523
RELAY DRIVE
Q6504/Q6502
Q6503
AC RELAY
SET ON
CN6506
PSW(-)
CN6505
G POWER SUPPLY

5-4. SCHEMATICS AND SUPPORTING INFORMATION

VM BOARD SCHEMATIC DIAGRAM


1
2
3
4
5
6
7
A
B
C
D
E
VM VELOCITY MOD
D:CN8006
CN9001 5P WHT :S-MICRO
+135V 1
+135V 2
NC 3
GND 4
GND 5
R9001 1 1/4W :FPRD
FB9001 MPZ2012S331
+135V
C9004 22 160V
C9006 0.0047 500V E
FB9002 MPZ2012S331
C9001 100 16V
C9002 0.1 25V F:1608
+9V 1
GND 2
VM 3
CN9002 3P WHT :S-MICRO
B:CN2801
B:CN2802
B:CN2803
C9003 1000p 50V B:1608
R9004 12k 1/10W :CHIP
R9005 33k 1/10W :CHIP
R9006 150 1/10W :CHIP
+9V
Q9001 2SD601A BUFF
R9002 820 1/10W :CHIP
R9003 680 1/10W :CHIP
Q9002 2SD601A BUFF
R9008 330 1/10W :CHIP
C9007 0.1 25V F:1608
R9009 220 1/10W :CHIP
R9010 220 1/10W :CHIP
Q9003 2SD601A BUFF
Q9005 2SD601A BUFF
Q9007 2SD601A BUFF
Q9009 2SD601A BUFF
R9011 6.8 1/4W :FPRD
R9012 6.8 1/4W :FPRD
R9013 6.8 1/4W :FPRD
R9014 6.8 1/4W :FPRD
R9015 6.8 1/4W :FPRD
R9016 6.8 1/4W :FPRD
R9017 6.8 1/4W :FPRD
R9018 6.8 1/4W :FPRD
Q9004 2SB709A BUFF
Q9006 2SB709A BUFF
Q9008 2SB709A BUFF
Q9010 2SB709A BUFF
C9009 10 160V
C9010 0.1 250V :MP
C9012 0.1 250V :MP
R9023 4.7k 1/10W :CHIP
R9024 180k 1/10W :CHIP
R9021 47 1/10W :CHIP
Q9011 2SA2005 VM DRIVE
C9014 0.47 250V :MP
R9026 150k 1/10W :CHIP
R9025 470 2W :RS
R9027 150k 1/10W :CHIP
C9008 10 50V
R9019 180k 1/10W :CHIP
Q9012 2SC5511 VM DRIVE
C9011 0.1 16V B:1608
C9013 0.1 25V F:1608
R9020 4.7k 1/10W :CHIP
R9022 47 1/10W :CHIP
CN9003 8P :B TO B-P
TO :VM COIL
1 GND
2 GND
3 GND
4 NC
5 NC
6 VM
7 VM
8 VM
VM COIL ASSY
9-965-926-01<DA4X>VM

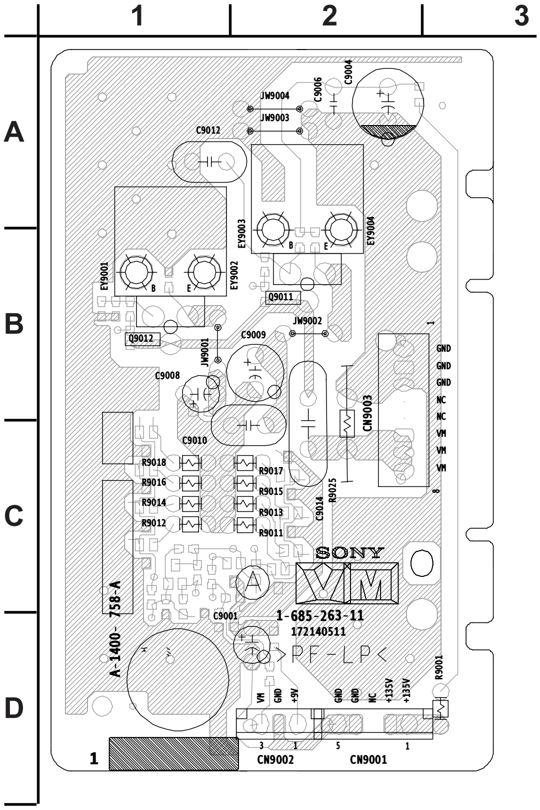
VM BOARD TRANSISTOR TABLE

	B	C	E
Q9001	0.0	9.0	5.2
Q9002	3.6	GND	4.3
Q9003	5.1	9.0	4.5
Q9004	3.6	GND	4.3
Q9005	5.1	9.0	4.5
Q9006	3.6	GND	4.3
Q9007	5.1	9.0	4.5
Q9008	3.6	GND	4.3
Q9009	5.1	9.0	4.5
Q9010	0.8	66.7	0.2
Q9011	133.8	66.7	134.3
Q9012	0.3	66.7	0.1

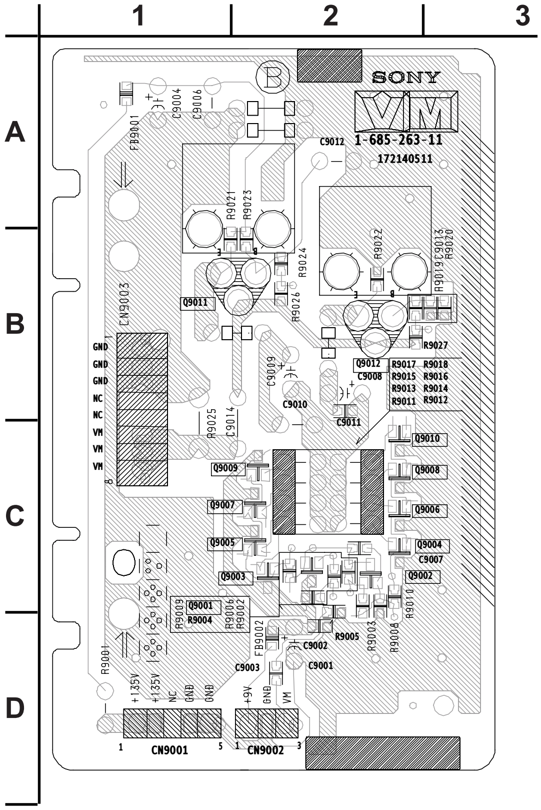
All voltages are in V.

VM [VELOCITY MOD]

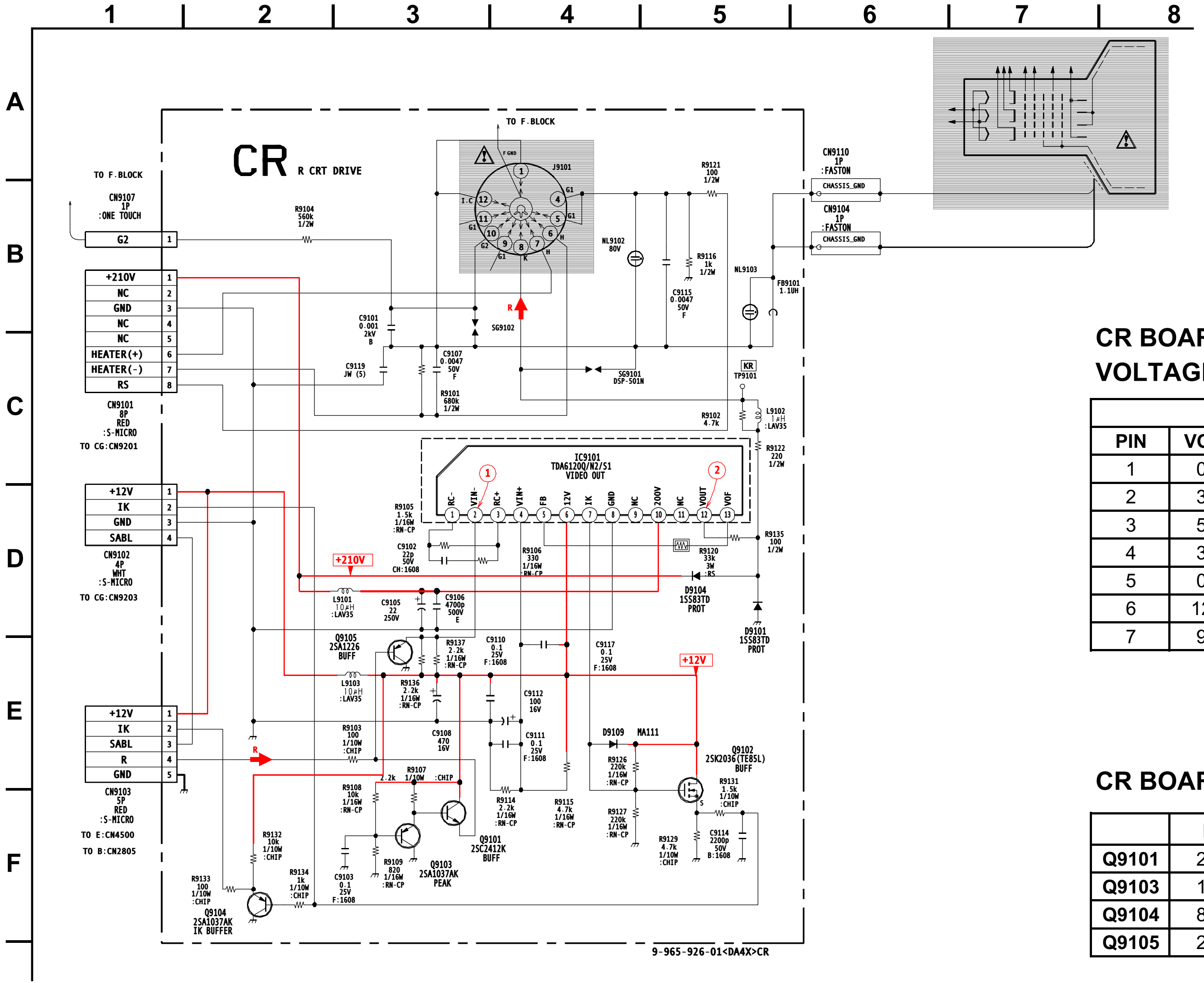
COMPONENT SIDE


1
2
3
A
B
C
D
SONY
VM
1-685-263-11
172140511
A-1400-758-A
CN9001
CN9002
CN9003
GND
NC
VM
+9V
+135V
C9001
C9004
C9006
C9008
C9009
C9010
C9012
C9014
EY9001
EY9002
EY9003
EY9004
JW9001
JW9002
JW9003
JW9004
Q9011
Q9012
R9001
R9011
R9012
R9013
R9014
R9015
R9016
R9017
R9018
R9025
>PF-LP<

CONDUCTOR SIDE


1
2
3
A
B
C
D
SONY
VM
1-685-263-11
172140511
CN9001
CN9002
CN9003
GND
NC
VM
+135V
+9V
C9001
C9002
C9003
C9004
C9006
C9007
C9008
C9009
C9010
C9011
C9012
C9014
FB9001
FB9002
Q9001
Q9002
Q9003
Q9004
Q9005
Q9006
Q9007
Q9008
Q9009
Q9010
Q9011
Q9012
R9001
R9002
R9003
R9004
R9005
R9006
R9008
R9009
R9010
R9011
R9012
R9013
R9014
R9015
R9016
R9017
R9018
R9019
R9020
R9021
R9022
R9023
R9024
R9025
R9026
R9027

CR BOARD SCHEMATIC DIAGRAM


1
2
3
4
5
6
7
8
A
B
C
D
E
F
CR R CRT DRIVE
TO F.BLOCK
CN9107 1P :ONE TOUCH
G2
CN9101 8P RED :S-MICRO
TO CG:CN9201
+210V
NC
GND
HEATER(+)
HEATER(-)
RS
CN9102 4P WHT :S-MICRO
TO CG:CN9203
+12V
IK
SABL
CN9103 5P RED :S-MICRO
TO E:CN4500
TO B:CN2805
R
J9101
IC9101 TDA6120Q/N2/S1 VIDEO OUT
CN9110 1P :FASTON
CN9104 1P :FASTON
CHASSIS_GND
Q9105 2SA1226 BUFF
Q9101 2SC2412K BUFF
Q9103 2SA1037AK PEAK
Q9104 2SA1037AK IK BUFFER
Q9102 2SK2036(TE85L) BUFF
D9104 1SS83TD PROT
D9101 1SS83TD PROT
D9109 MA111
SG9101 DSP-501N
SG9102
L9101 10μH :LA35
L9102 1μH :LA35
L9103 10μH :LA35
FB9101 1.1UH
NL9102
NL9103
TP9101
+210V
+12V
9-965-926-01<DA4X>CR

CR BOARD IC VOLTAGE TABLE

IC9101			
PIN	**VOLT**	**PIN**	**VOLT**
1	0.0	8	GND
2	3.5	9	N/C
3	5.0	10	200.0
4	3.5	11	N/C
5	0.0	12	144.4
6	12.0	13	2.2
7	9.4	All voltages are in V.	

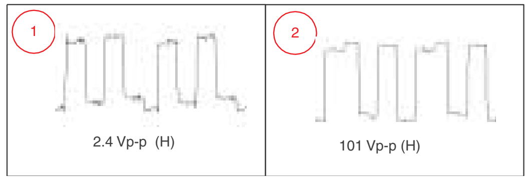
CR BOARD TRANSISTOR TABLE

	B	C	E
Q9101	2.2	12.0	2.7
Q9103	1.6	GND	2.2
Q9104	8.4	GND	8.5
Q9105	2.8	GND	3.7

	D	G	S
Q9102	12.0	8.3	8.9

All voltages are in V.

CR BOARD WAVEFORMS

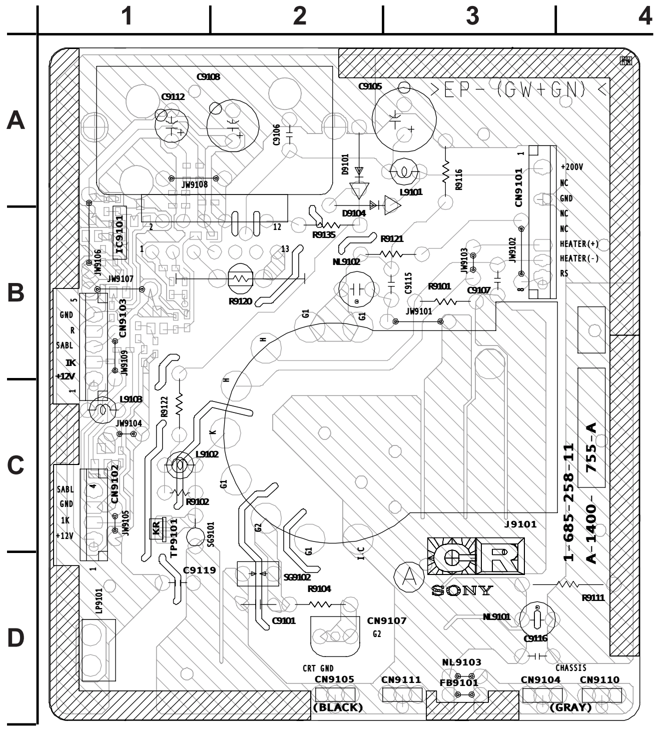


2.4 Vp-p (H)

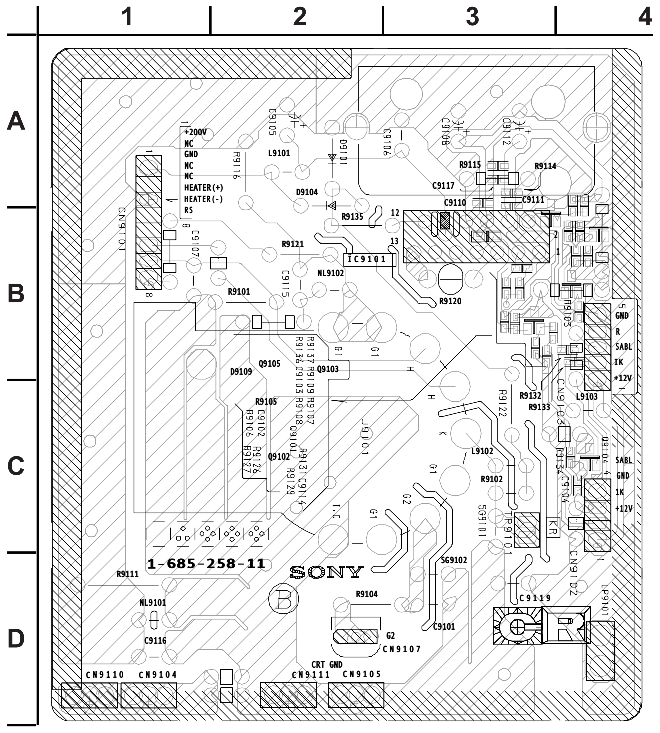
101 Vp-p (H)

CR [R CRT DRIVE]

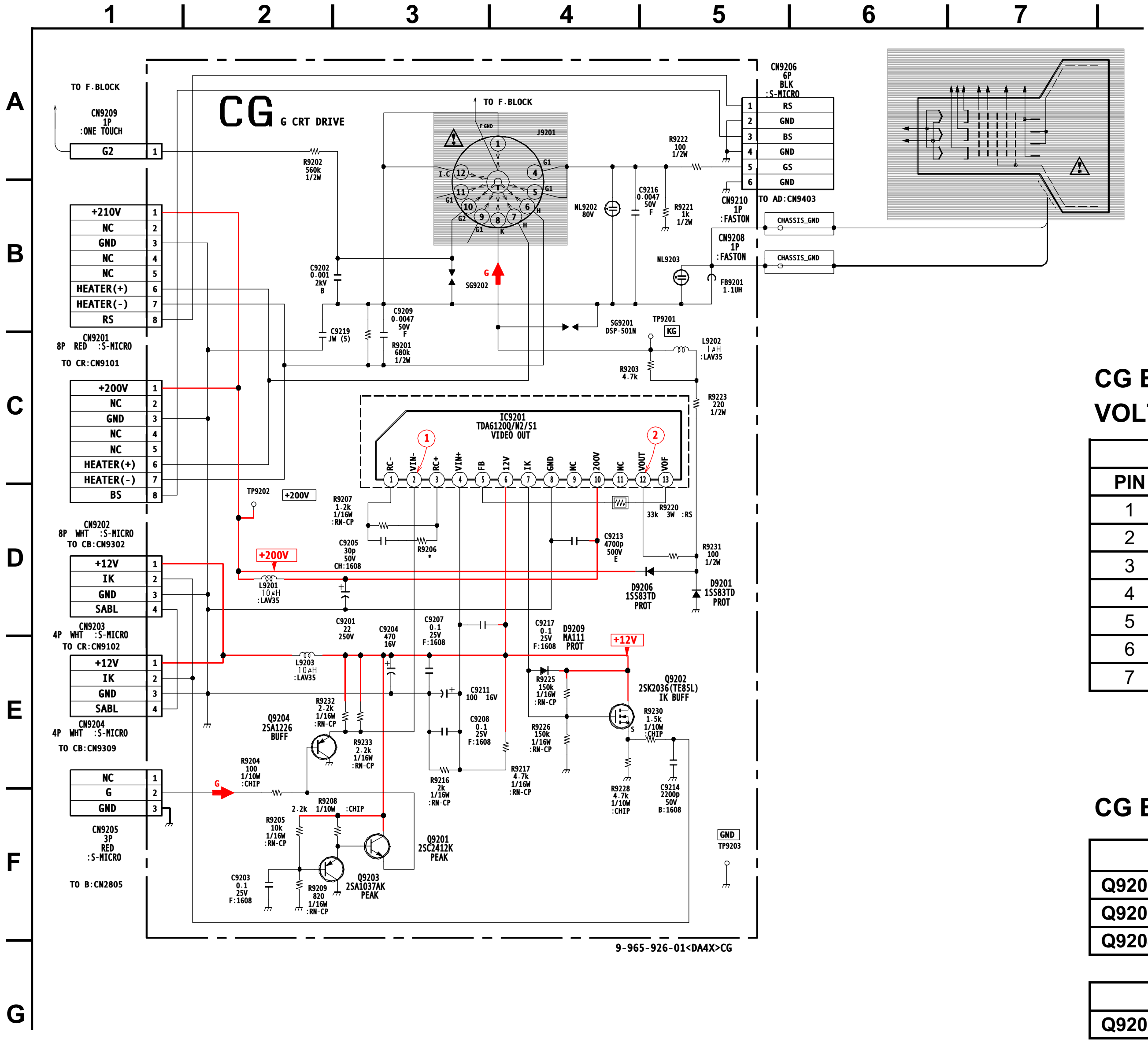
COMPONENT SIDE


1
2
3
4
A
B
C
D
IC9101
CN9101
CN9102
J9101
SONY
1-685-258-11
A-1400-755-A
CN9105
CN9111
CN9104
CN9110
(BLACK)
(GRAY)
CN9107
CRT GND
CHASSIS
+200V
HEATER(+)
HEATER(-)
RS

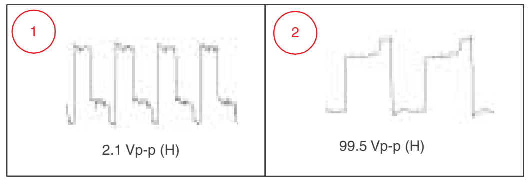
CONDUCTOR SIDE


1
2
3
4
A
B
C
D
IC9101
1-685-258-11
SONY
CN9110
CN9104
CN9111
CN9105
CN9107
CRT GND

CG BOARD SCHEMATIC DIAGRAM


1
2
3
4
5
6
7
A
B
C
D
E
F
G
CG G CRT DRIVE
TO F.BLOCK
CN9209 1P :ONE TOUCH
G2
+210V
NC
GND
HEATER(+)
HEATER(-)
RS
CN9201 8P RED :S-MICRO
TO CR:CN9101
+200V
BS
CN9202 8P WHT :S-MICRO
TO CB:CN9302
+12V
IK
SABL
CN9203 4P WHT :S-MICRO
TO CR:CN9102
CN9204 4P WHT :S-MICRO
TO CB:CN9309
G
CN9205 3P RED :S-MICRO
TO B:CN2805
J9201
R9202 560k 1/2W
C9202 0.001 2kV B
SG9202
C9209 0.0047 50V F
C9219 JW (5)
R9201 680k 1/2W
NL9202 80V
C9216 0.0047 50V F
R9221 1k 1/2W
R9222 100 1/2W
CN9206 6P BLK :S-MICRO
GS
CN9210 1P :FASTON
TO AD:CN9403
CN9208 1P :FASTON
CHASSIS_GND
NL9203
FB9201 1.1UH
SG9201 DSP-501N
TP9201
KG
L9202 1μH :LAV35
R9203 4.7k
R9223 220 1/2W
IC9201 TDA6120Q/N2/S1 VIDEO OUT
RC-
VIN-
RC+
VIN+
FB
12V
200V
VOUT
VOF
①
②
TP9202
R9207 1.2k 1/16W :RN-CP
R9206
C9205 30p 50V CH:1608
C9213 4700p 500V E
R9220 33k 3W :RS
R9231 100 1/2W
D9206 1SS83TD PROT
D9201 1SS83TD PROT
L9201 10μH :LAV35
C9201 22 250V
C9204 470 16V
C9207 0.1 25V F:1608
C9217 0.1 25V F:1608
D9209 MA111 PROT
L9203 10μH :LAV35
C9211 100 16V
C9208 0.1 25V F:1608
R9225 150k 1/16W :RN-CP
R9226 150k 1/16W :RN-CP
Q9202 2SK2036(TE85L) IK BUFF
R9230 1.5k 1/10W :CHIP
R9228 4.7k 1/10W :CHIP
C9214 2200p 50V B:1608
Q9204 2SA1226 BUFF
R9232 2.2k 1/16W :RN-CP
R9233 2.2k 1/16W :RN-CP
R9204 100 1/10W :CHIP
R9208 2.2k 1/10W :CHIP
R9205 10k 1/16W :RN-CP
R9216 2k 1/16W :RN-CP
R9217 4.7k 1/16W :RN-CP
Q9201 2SC2412K PEAK
Q9203 2SA1037AK PEAK
C9203 0.1 25V F:1608
R9209 820 1/16W :RN-CP
TP9203
9-965-926-01<DA4X>CG

CG BOARD WAVEFORMS



2.1 Vp-p (H)

99.5 Vp-p (H)

CG BOARD IC VOLTAGE TABLE

IC9201			
PIN	**VOLT**	**PIN**	**VOLT**
1	0.0	8	GND
2	3.5	9	N/C
3	5.0	10	200.0
4	3.5	11	N/C
5	0.0	12	144.4
6	12.0	13	2.2
7	9.4		

All voltages are in V.

CG BOARD TRANSISTOR TABLE

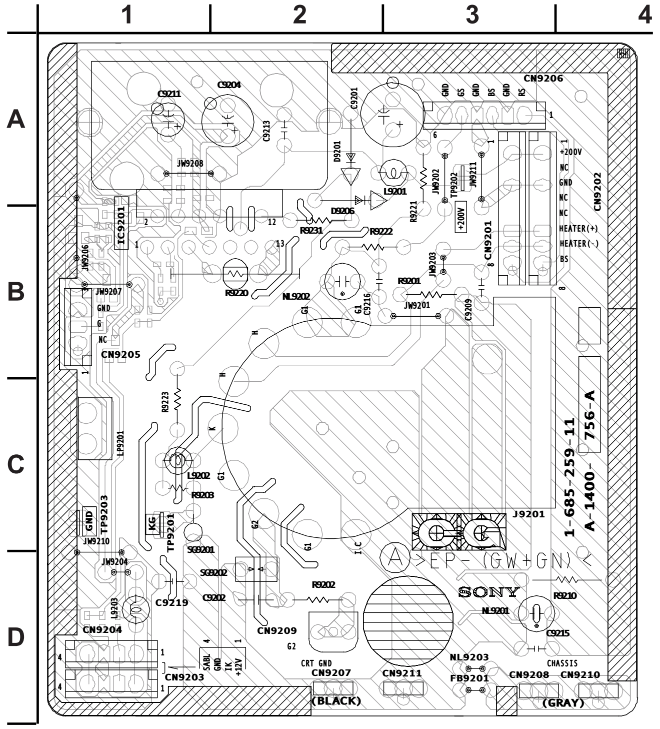
	B	C	E
Q9201	2.2	12.0	2.7
Q9203	1.6	GND	2.2
Q9204	2.8	GND	3.7

	D	G	S
Q9202	12.0	8.7	9.3

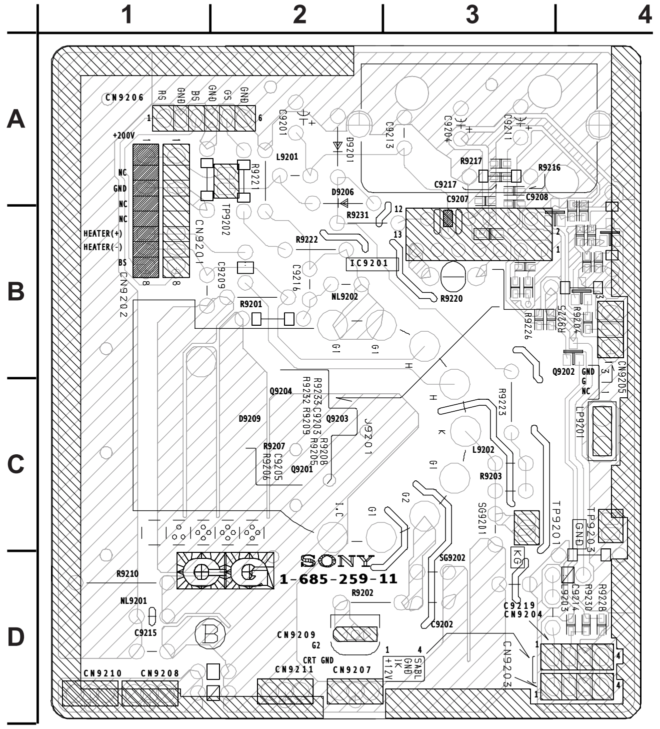
All voltages are in V.

CG [G CRT DRIVE]

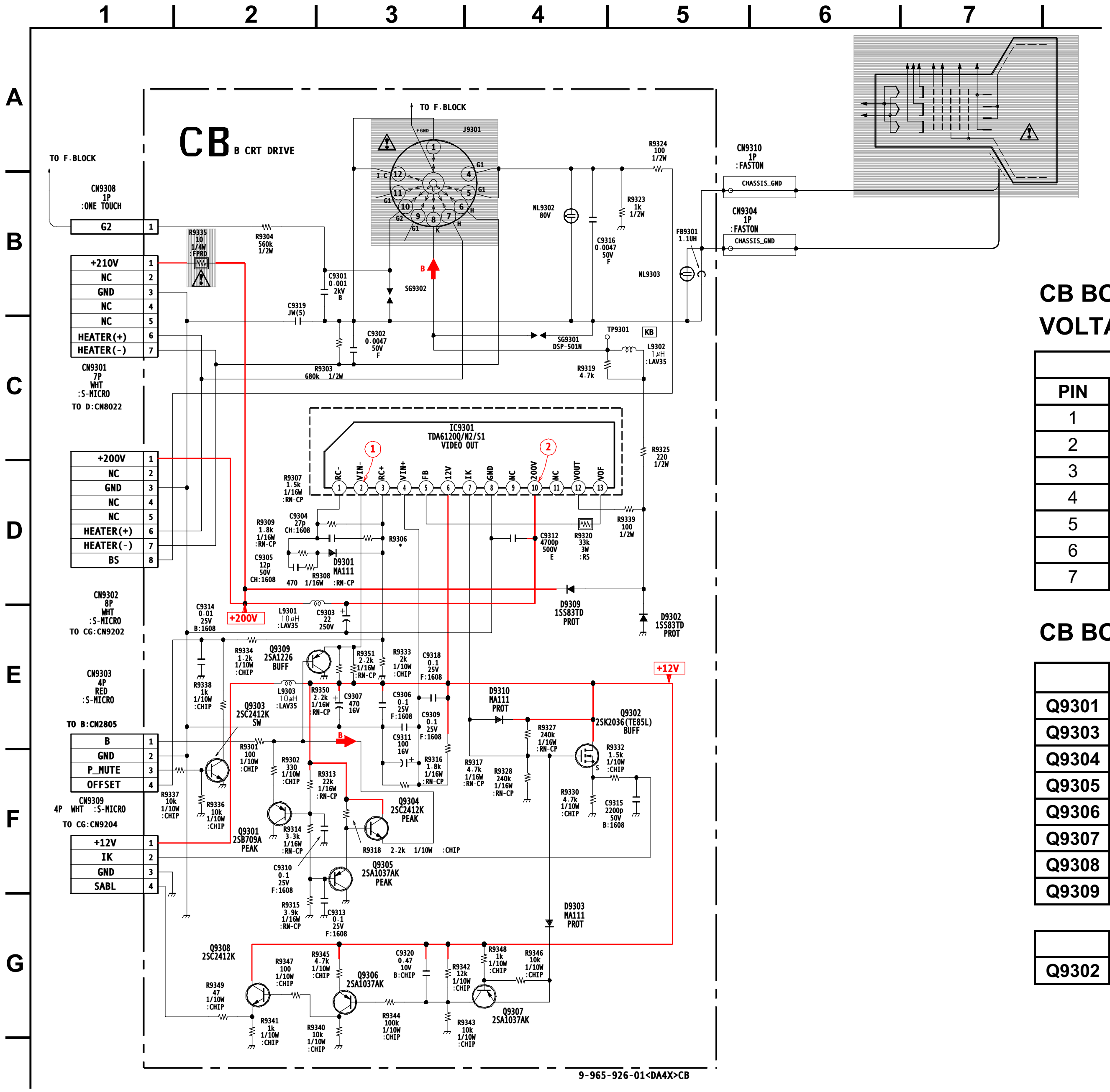
COMPONENT SIDE


1
2
3
4
A
B
C
D
CN9206
CN9202
CN9201
J9201
IC9201
CN9205
CN9204
CN9203
CN9209
CN9207
CN9211
CN9208
CN9210
FB9201
NL9203
(BLACK)
(GRAY)
SONY
1-685-259-11
A-1400-756-A
EP- (GW+GN)

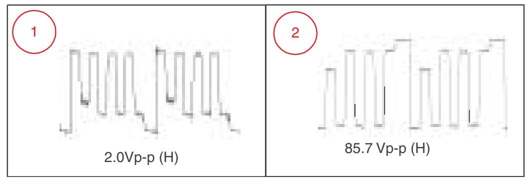
CONDUCTOR SIDE


1
2
3
4
A
B
C
D
CN9206
IC9201
SONY
1-685-259-11
CN9209
CN9211
CN9207
CN9210
CN9208

CB BOARD SCHEMATIC DIAGRAM


1
2
3
4
5
6
7
A
B
C
D
E
F
G
CB B CRT DRIVE
TO F.BLOCK
CN9308
1P
:ONE TOUCH
G2 1
+210V 1
NC 2
GND 3
NC 4
NC 5
HEATER(+) 6
HEATER(-) 7
CN9301
7P
WHT
:S-MICRO
TO D:CN8022
+200V 1
NC 2
GND 3
NC 4
NC 5
HEATER(+) 6
HEATER(-) 7
BS 8
CN9302
8P
WHT
:S-MICRO
TO CG:CN9202
CN9303
4P
RED
:S-MICRO
TO B:CN2805
B 1
GND 2
P_MUTE 3
OFFSET 4
CN9309
4P WHT :S-MICRO
TO CG:CN9204
+12V 1
IK 2
GND 3
SABL 4
R9335
10
1/4W
:FPRD
R9304
560k
1/2W
J9301
F GND
I.C
G1
G2
H
K
B
SG9302
C9301
0.001
2kV
B
C9319
JW(5)
C9302
0.0047
50V
F
R9303
680k 1/2W
NL9302
80V
C9316
0.0047
50V
F
R9324
100
1/2W
R9323
1k
1/2W
NL9303
FB9301
1.1UH
CN9310
1P
:FASTON
CHASSIS_GND
CN9304
1P
:FASTON
CHASSIS_GND
SG9301
DSP-501N
TP9301
KB
L9302
1μH
:LAV35
R9319
4.7k
IC9301
TDA6120Q/N2/S1
VIDEO OUT
①
②
RC-
VIN-
RC+
VIN+
FB
12V
IK
GND
NC
200V
NC
VOUT
VOF
R9325
220
1/2W
R9307
1.5k
1/16W
:RN-CP
R9309
1.8k
1/16W
:RN-CP
C9304
27p
CH:1608
R9306
*
C9305
12p
50V
CH:1608
470
R9308
1/16W
:RN-CP
D9301
MA111
C9312
4700p
500V
E
R9320
33k
3W
:RS
R9339
100
1/2W
D9309
1SS83TD
PROT
D9302
1SS83TD
PROT
C9314
0.01
25V
B:1608
+200V
L9301
10μH
:LAV35
C9303
22
250V
R9334
1.2k
1/10W
:CHIP
Q9309
2SA1226
BUFF
R9351
2.2k
1/16W
:RN-CP
R9333
2k
1/10W
:CHIP
C9318
0.1
25V
F:1608
R9338
1k
1/10W
:CHIP
L9303
10μH
:LAV35
Q9303
2SC2412K
SW
R9350
2.2k
1/16W
:RN-CP
C9307
470
16V
C9306
0.1
25V
F:1608
C9309
0.1
25V
F:1608
C9311
100
16V
D9310
MA111
PROT
+12V
Q9302
2SK2036(TE85L)
BUFF
R9327
240k
1/16W
:RN-CP
R9301
100
1/10W
:CHIP
R9302
330
1/10W
:CHIP
R9313
22k
1/16W
:RN-CP
R9316
1.8k
1/16W
:RN-CP
R9317
4.7k
1/16W
:RN-CP
R9328
240k
1/16W
:RN-CP
R9332
1.5k
1/10W
:CHIP
S
R9330
4.7k
1/10W
:CHIP
C9315
2200p
50V
B:1608
R9337
10k
1/10W
:CHIP
R9336
10k
1/10W
:CHIP
Q9301
2SB709A
PEAK
R9314
3.3k
1/16W
:RN-CP
Q9304
2SC2412K
PEAK
R9318 2.2k 1/10W :CHIP
C9310
0.1
25V
F:1608
Q9305
2SA1037AK
PEAK
R9315
3.9k
1/16W
:RN-CP
C9313
0.1
25V
F:1608
D9303
MA111
PROT
Q9308
2SC2412K
R9347
100
1/10W
:CHIP
R9345
4.7k
1/10W
:CHIP
Q9306
2SA1037AK
C9320
0.47
10V
B:CHIP
R9342
12k
1/10W
:CHIP
R9348
1k
1/10W
:CHIP
R9346
10k
1/10W
:CHIP
R9349
47
1/10W
:CHIP
R9341
1k
1/10W
:CHIP
R9340
10k
1/10W
:CHIP
R9344
100k
1/10W
:CHIP
R9343
10k
1/10W
:CHIP
Q9307
2SA1037AK
9-965-926-01<DA4X>CB

CB BOARD WAVEFORMS



CB BOARD IC VOLTAGE TABLE

IC9301			
PIN	VOLT	PIN	VOLT
1	0.0	8	GND
2	3.5	9	N/C
3	5.0	10	200.0
4	3.5	11	N/C
5	0.0	12	144.4
6	12.0	13	2.2
7	9.4		

All voltages are in V.

CB BOARD TRANSISTOR TABLE

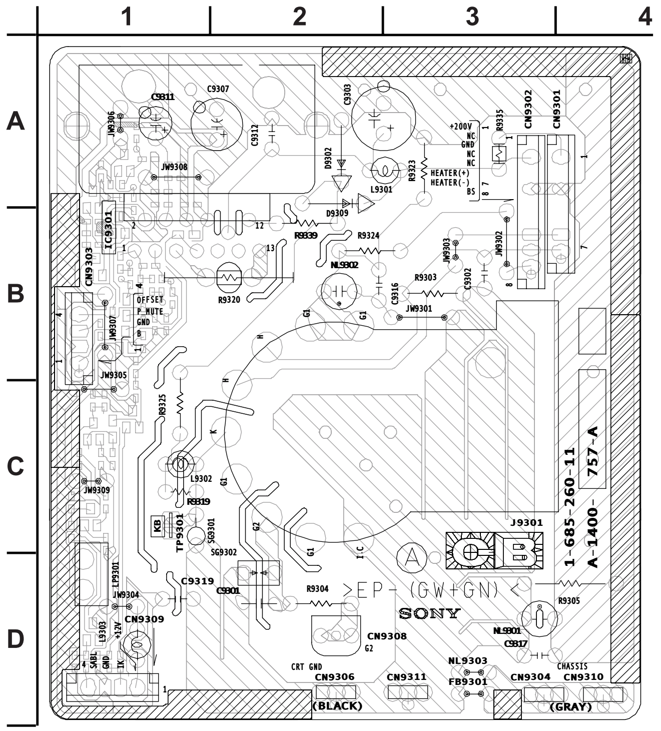
	B	C	E
Q9301	3.9	GND	2.7
Q9303	0.0	0.0	GND
Q9304	2.3	12.0	2.7
Q9305	1.7	GND	2.3
Q9306	7.3	7.7	7.8
Q9307	11.7	5.4	11.8
Q9308	7.7	11.7	7.0
Q9309	2.8	GND	3.7

	D	G	S
Q9302	12.0	8.5	9.2

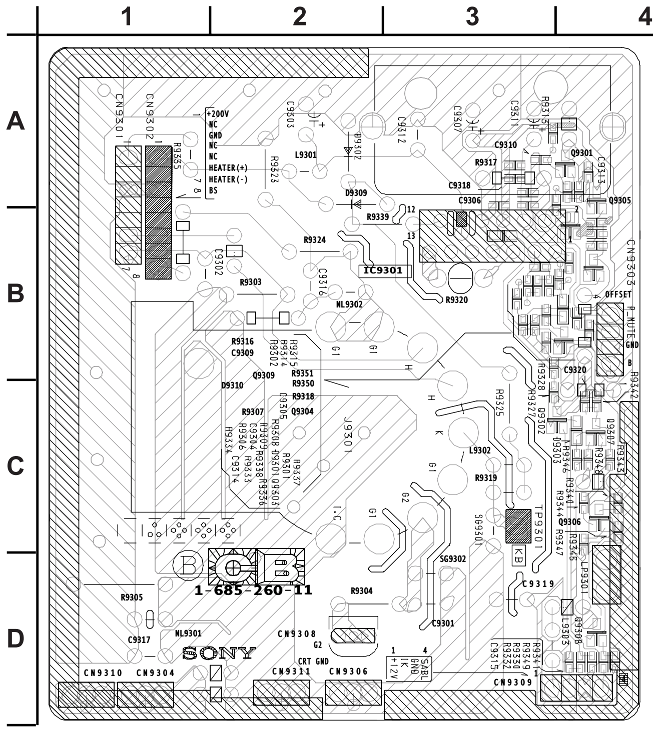
All voltages are in V.

CB [B CRT DRIVE]

COMPONENT SIDE


1
2
3
4
A
B
C
D
C9311
C9307
C9313
C9303
CN9302
CN9301
JW9308
+200V
NC
GND
HEATER(+)
HEATER(-)
BS
L9301
D9309
R9339
R9324
IC9301
NL9302
R9303
JW9301
CN9303
OFFSET
P_MUTE
GND
B
JW9305
R9320
JW9309
L9302
R9319
TP9301
KB
SG9302
J9301
SG9301
C9319
C9301
R9304
R9305
EP (G W+GN)
SONY
CN9309
CN9308
G2
CRT GND
CN9306
(BLACK)
CN9311
NL9303
FB9301
CN9304
CHASSIS
CN9310
(GRAY)
NL9301
C9317
1-685-260-11
A-1400-757-A

CONDUCTOR SIDE


1
2
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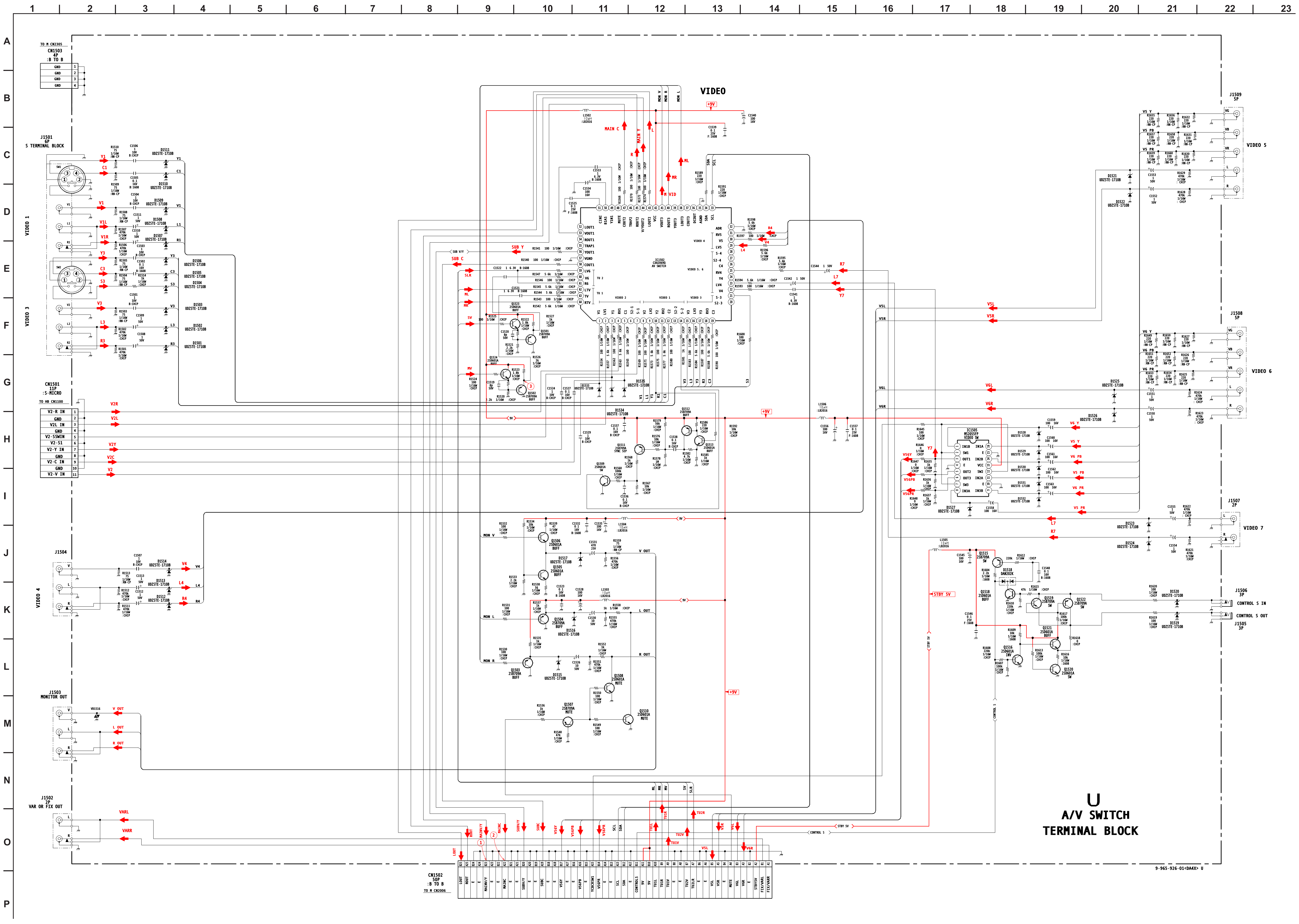
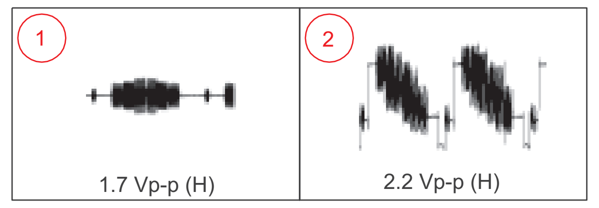
A
B
C
D
CN9301
CN9302
L9301
C9310
R9317
Q9301
Q9305
C9318
C9306
D9309
R9339
R9324
IC9301
R9303
NL9302
R9320
CN9303
OFFSET
P_MUTE
GND
Q9309
R9316
C9309
D9310
R9307
L9302
R9319
TP9301
KB
C9319
SG9302
1-685-260-11
R9305
R9304
C9301
C9317
NL9301
SONY
CN9308
G2
CRT GND
CN9310
CN9304
CN9311
CN9306
CN9309

U BOARD SCHEMATIC DIAGRAM


VIDEO
J1501 6P S TERMINAL BLOCK
VIDEO 1
VIDEO 3
CN1503 4P :B TO B
TO M CN2305
CN1501 11P :S-MICRO
TO HB CN1100
V2-R IN
GND
V2L IN
GND
V2-SSWIN
V2-S1
V2-Y IN
GND
V2-C IN
GND
V2-V IN
J1504
VIDEO 4
J1503 MONITOR OUT
J1502 2P VAR OR FIX OUT
IC1502 CXA2069Q AV SWITCH
IC1505 MM1255XF VIDEO SW
J1509 5P
VIDEO 5
J1508 5P
VIDEO 6
J1507 2P
VIDEO 7
J1506 3P
CONTROL S IN
CONTROL S OUT
J1505 3P
CN1502 50P :B TO B
TO M CN2006
U
A/V SWITCH
TERMINAL BLOCK
9-965-926-01<DA4X> U

U BOARD WAVEFORMS



U BOARD IC VOLTAGE LIST

IC1502		21	4.9	43	4.5	IC1505	
PIN	VOLT	22	3.9	44	4.3	PIN	VOLT
1	3.9	23	4.5	45	4.5	1	4.7
2	4.5	24	N/C	46	N/C	2	0.0
3	3.9	25	4.5	47	4.4	3	3.2
4	4.5	26	N/C	48	N/C	4	GND
5	4.5	27	N/C	49	4.9	5	3.2
6	N/C	28	N/C	50	4.5	6	3.2
7	4.9	29	4.5	51	4.5	7	0.0
8	4.3	30	3.9	52	N/C	8	4.6
9	4.5	31	4.5	53	4.4	9	4.6
10	3.9	32	GND	54	N/C	10	GND
11	4.5	33	4.6	55	N/C	11	4.7
12	4.5	34	4.6	56	4.1	12	0.0
13	N/C	35	GND	57	GND	13	9.0
14	4.9	36	N/C	58	4.4	14	4.7
15	3.9	37	N/C	59	4.5	15	GND
16	4.5	38	4.5	60	5.0	16	4.7
17	3.9	39	N/C	61	4.5		
18	4.5	40	4.5	62	4.5		
19	4.5	41	4.4	63	4.9		
20	N/C	42	9.0	64	4.5		

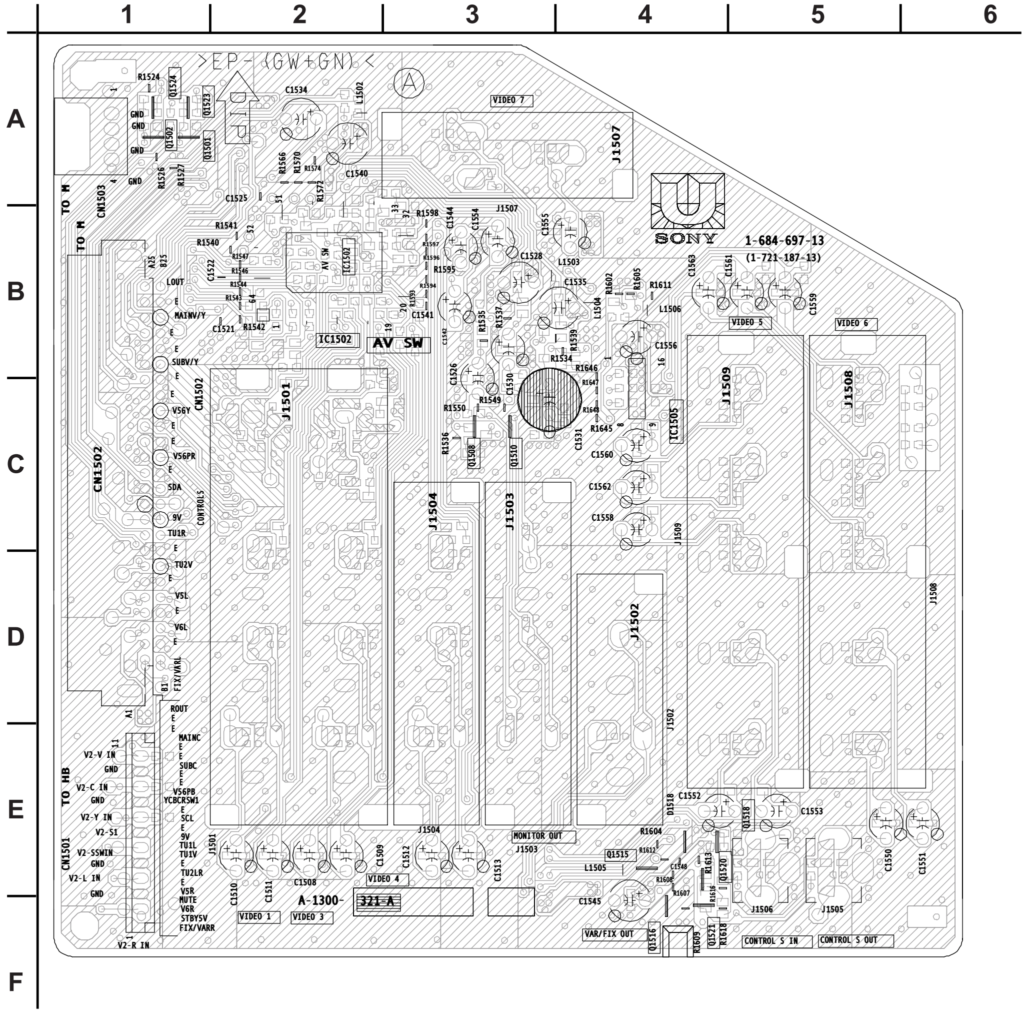
All voltages are in V.

U BOARD TRANSISTOR TABLE

	B	C	E
Q1501	2.0	GND	2.7
Q1502	3.3	GND	4.0
Q1503	4.5	GND	5.2
Q1504	4.5	GND	5.2
Q1505	1.6	3.7	0.9
Q1506	4.4	8.3	3.8
Q1507	0.0	0.0	0.0
Q1508	0.0	0.0	GND
Q1509	0.0	4.9	GND
Q1510	0.0	0.0	GND
Q1511	8.5	0.0	9.0
Q1512	8.4	5.3	9.0
Q1513	3.8	8.4	3.2
Q1515	4.9	4.2	5.0
Q1516	0.6	0.1	GND
Q1518	0.0	4.9	GND
Q1519	5.0	0.0	0.0
Q1520	0.6	0.0	GND
Q1521	0.1	5.0	0.0
Q1522	5.0	0.0	0.0
Q1523	4.5	9.0	3.9
Q1524	6.5	9.0	3.9

All voltages are in V.

U [AV SWITCH, TERMINAL BLOCK] [COMPONENT SIDE]


1
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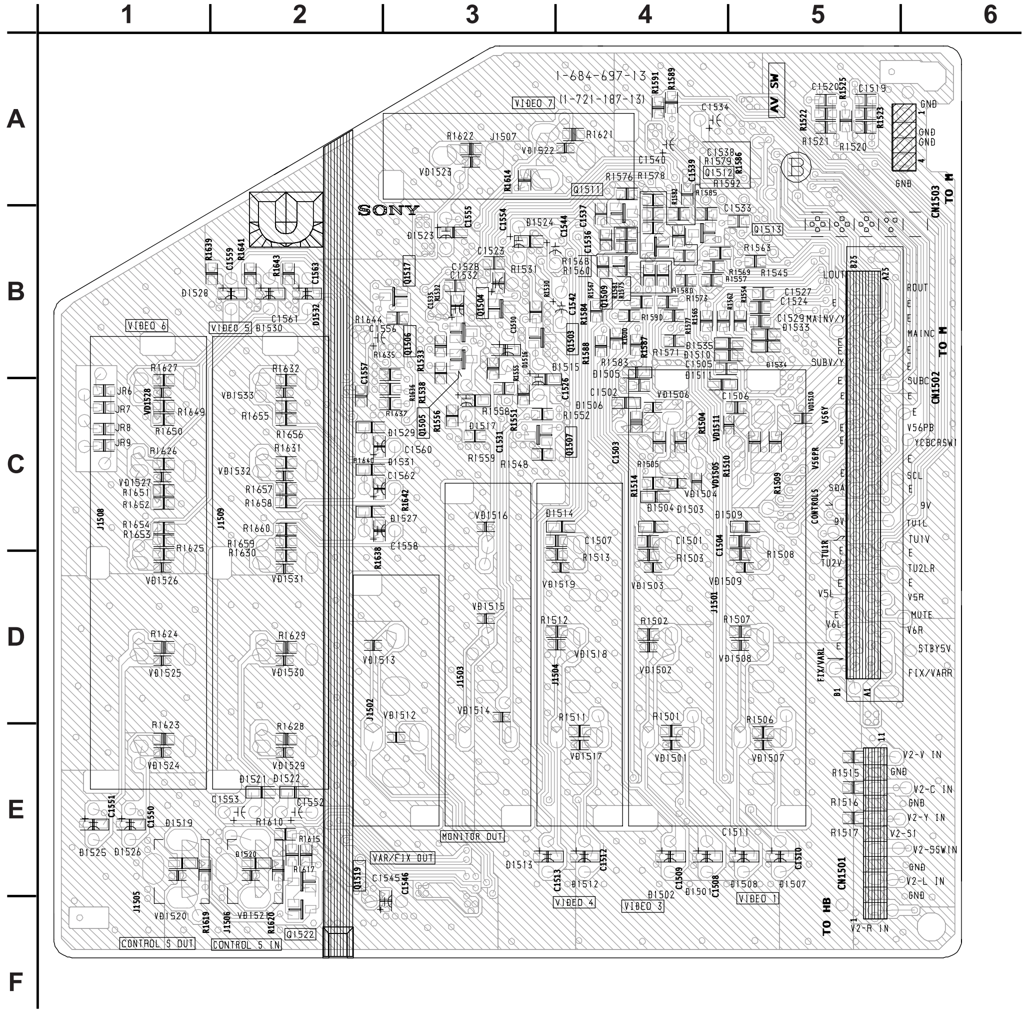
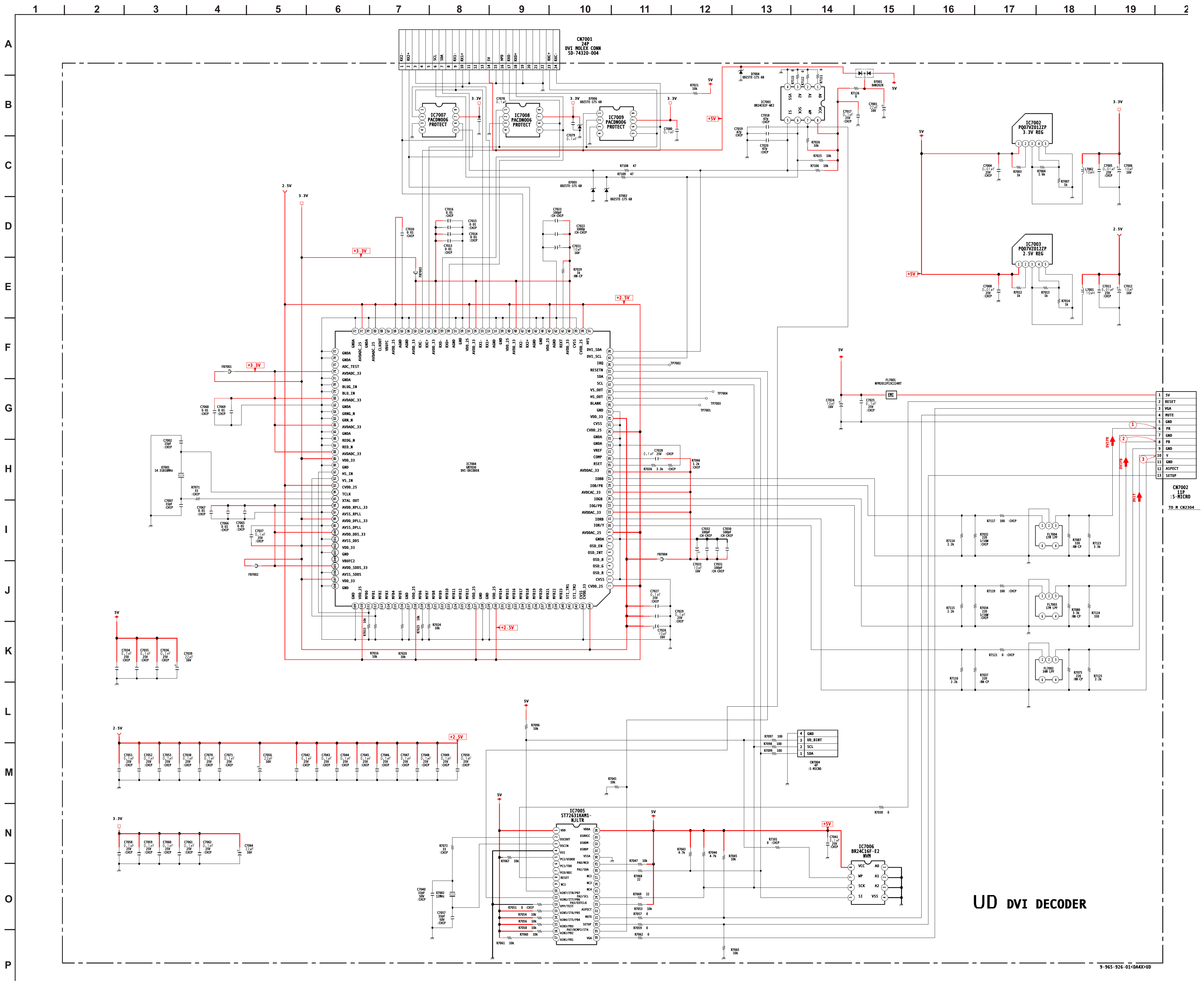
4
5
6
A
B
C
D
E
F
>EP-(GW+GN)<
SONY
1-684-697-13
(1-721-187-13)
AV SW
IC1502
IC1505
J1501
J1502
J1503
J1504
J1507
J1508
J1509
CN1501
CN1502
CN1503
TO M
TO HB
VIDEO 1
VIDEO 3
VIDEO 4
VIDEO 5
VIDEO 6
VIDEO 7
MONITOR OUT
VAR/FIX OUT
CONTROL S IN
CONTROL S OUT
A-1300-321-A

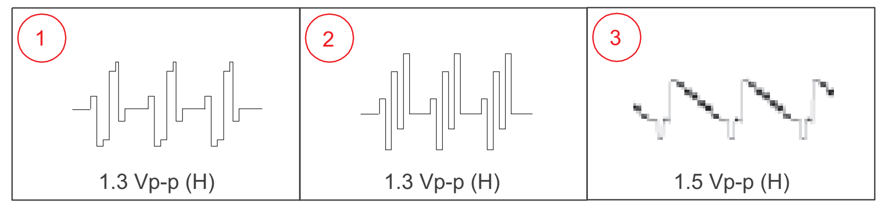
[CONDUCTOR SIDE]


1
2
3
4
5
6
A
B
C
D
E
F
SONY
1-684-697-13
(1-721-187-13)
AV SW
CN1501
CN1502
CN1503
TO M
TO HB
VIDEO 1
VIDEO 3
VIDEO 4
VIDEO 5
VIDEO 6
VIDEO 7
MONITOR OUT
VAR/FIX OUT
CONTROL S OUT
CONTROL S IN

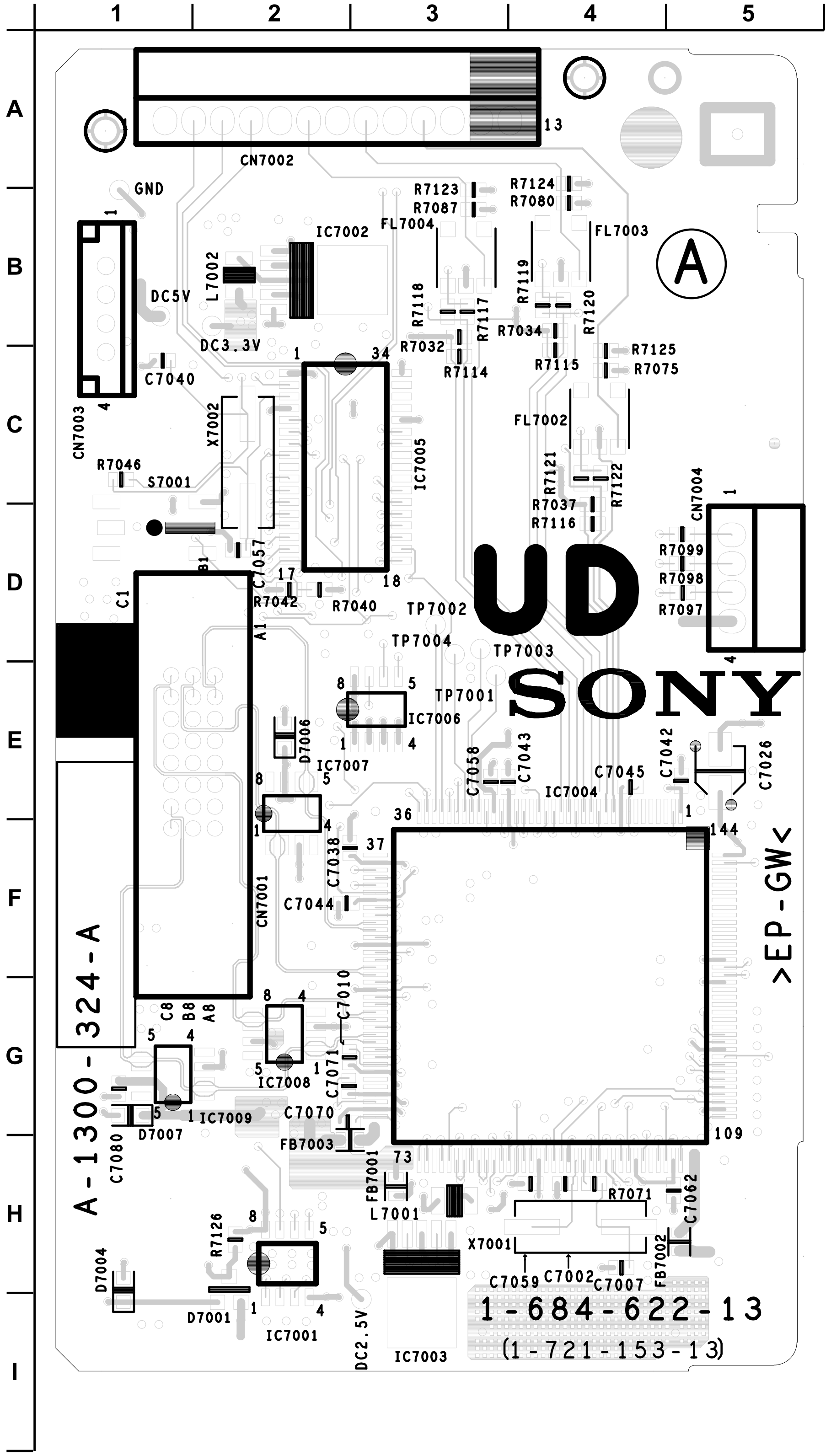
UD BOARD SCHEMATIC DIAGRAM The UD board is not field repairable. If service is required, use the following part number to order a complete replacement board.
A-1300-324-A UD Board, Complete


CN7001
24P
DVI MOLEX CONN
SD-74320-004
IC7007
PACDN006
PROTECT
IC7008
PACDN006
PROTECT
IC7009
PACDN006
PROTECT
IC7001
BR24C02F-WE2
IC7002
PQ07VZ012ZP
3.3V REG
IC7003
PQ07VZ012ZP
2.5V REG
IC7004
DVI DECODER
IC7005
ST72631K4M1-NJ1TR
IC7006
BR24C16F-E2
NVM
CN7002
13P
S-MICRO
TO M CN2304
1 5V
2 RESET
3 VGA
4 MUTE
5 GND
6 PR
7 GND
8 PB
9 GND
10 Y
11 GND
12 ASPECT
13 SETUP
CN7004
4P
S-MICRO
4 GND
3 UD_BINT
2 SCL
1 SDA
+3.3V
+2.5V
+5V
5V
3.3V
2.5V
UD DVI DECODER
9-965-926-01<DAAX>UD

UD BOARD WAVEFORMS



UD [DVI DECODER] [COMPONENT SIDE]


1
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A
B
C
D
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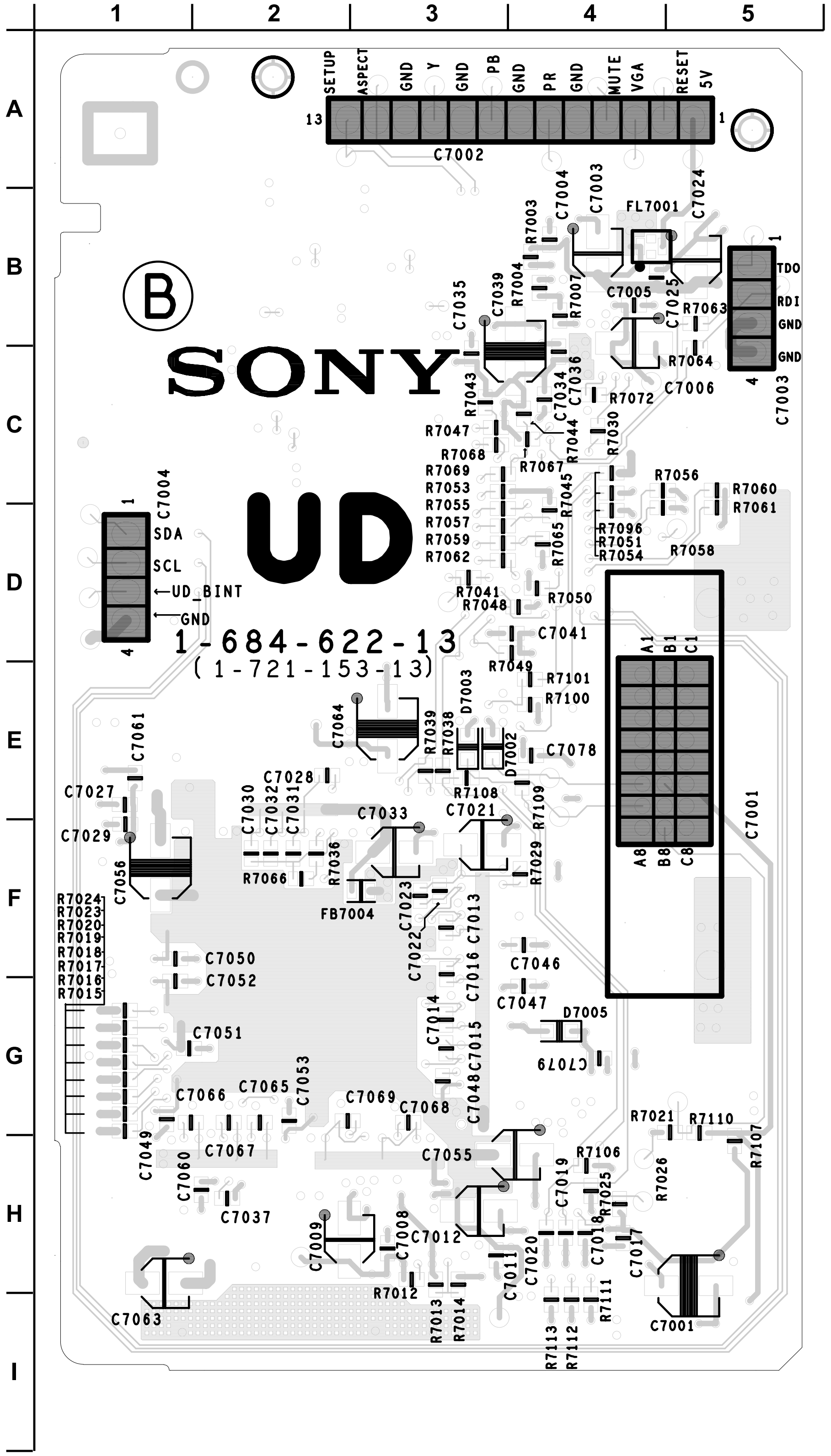
F
G
H
I
CN7002
13
GND
1
IC7002
R7123
R7087
FL7004
R7124
R7080
FL7003
A
DC5V
L7002
DC3.3V
R7118
R7117
R7119
R7034
R7120
R7032
R7114
R7115
R7125
R7075
C7040
1
34
CN7003
4
X7002
IC7005
FL7002
R7046
S7001
R7121
R7037
R7116
R7122
CN7004
1
R7099
R7098
R7097
4
C1
B1
C7057
A1
17
R7042
R7040
18
TP7002
UD
TP7004
TP7003
SONY
8
5
TP7001
IC7006
1
4
D7006
IC7007
8
5
C7058
C7043
C7045
C7042
C7026
IC7004
36
1
144
37
C7038
>EP-GW<
CN7001
C7044
A-1300-324-A
C8
B8
A8
8
4
C7010
5
4
5
1
IC7008
C7071
C7070
1 IC7009
D7007
C7080
FB7003
109
FB7001
73
R7126
8
5
L7001
R7071
C7062
X7001
FB7002
D7004
C7059
C7002
C7007
D7001
1
4
IC7001
DC2.5V
IC7003
1-684-622-13
(1-721-153-13)

[CONDUCTOR SIDE]


1
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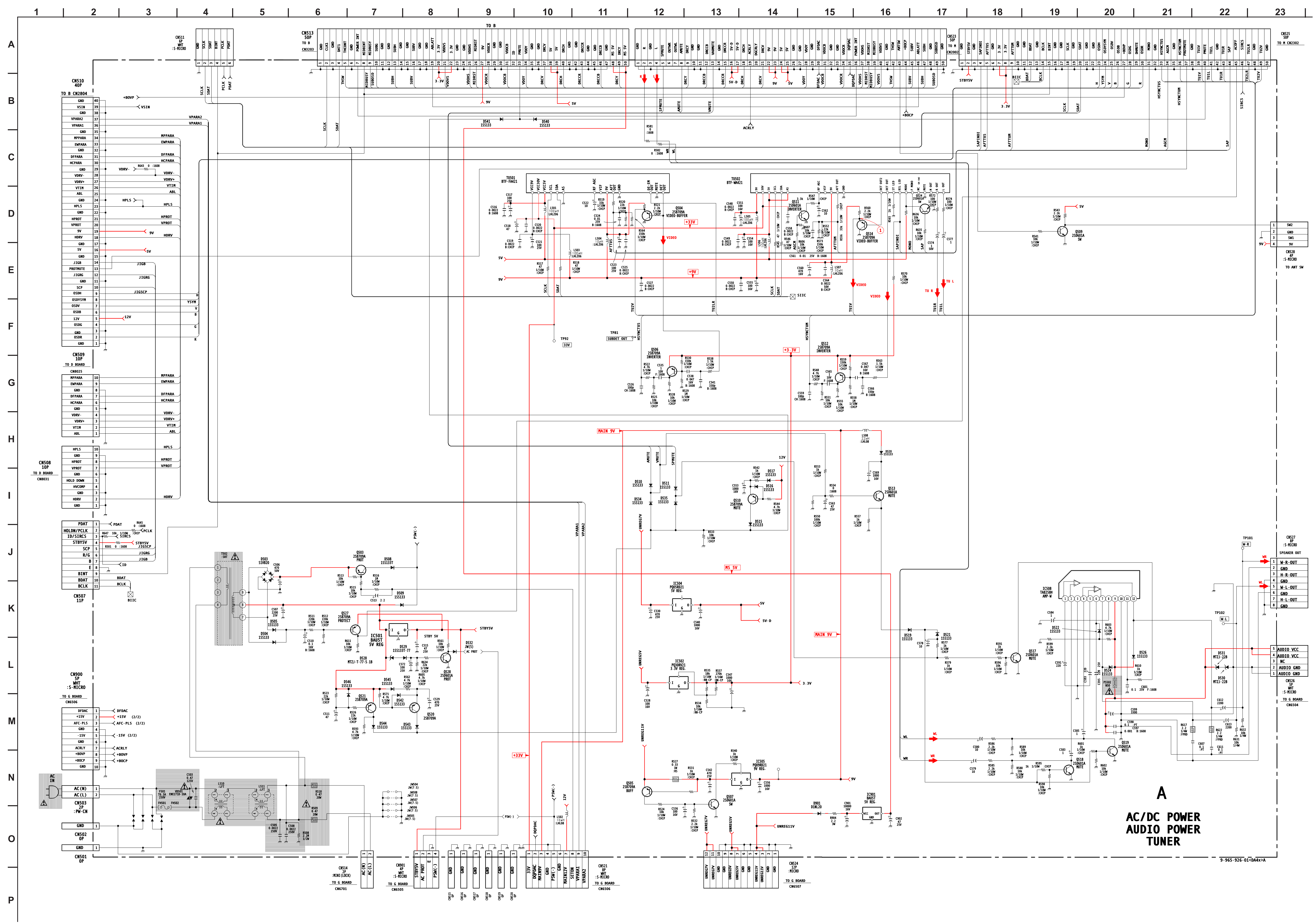
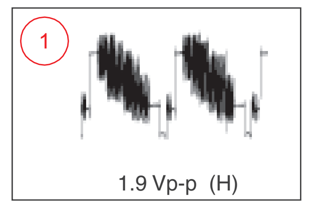
A
B
C
D
E
F
G
H
I
SETUP
ASPECT
GND
Y
GND
PB
GND
PR
GND
MUTE
VGA
RESET
5V
13
1
C7002
R7003
C7004
C7003
FL7001
C7024
1
TDO
RDI
GND
GND
4
C7003
B
C7035
C7039
R7004
R7007
C7005
C7025
R7063
SONY
R7064
C7006
R7043
C7034
C7036
R7072
R7047
R7044
R7030
R7068
R7069
R7053
R7055
R7057
R7059
R7062
R7067
R7045
R7065
R7056
R7060
R7061
R7096
R7051
R7054
R7058
1
C7004
SDA
SCL
UD_BINT
GND
4
UD
R7041
R7048
R7050
C7041
1-684-622-13
(1-721-153-13)
R7049
R7101
R7100
A1
B1
C1
C7061
C7064
R7039
R7038
D7003
D7002
C7078
C7027
C7028
C7030
C7032
C7031
R7108
R7109
C7033
C7021
C7029
C7056
R7066
R7036
FB7004
C7023
R7029
A8
B8
C8
C7001
R7024
R7023
R7020
R7019
R7018
R7017
R7016
R7015
C7050
C7052
C7022
C7016
C7013
C7046
C7047
C7051
C7014
C7015
D7005
C7079
C7066
C7065
C7053
C7069
C7068
C7048
C7049
C7067
C7055
R7021
R7110
R7107
R7106
R7026
C7060
C7037
C7019
R7025
C7009
C7008
C7012
C7018
C7017
C7011
C7020
R7012
R7013
R7014
R7113
R7112
R7111
C7063
C7001

A BOARD SCHEMATIC DIAGRAM



A BOARD WAVEFORMS



A BOARD IC VOLTAGE LIST

IC501	
PIN	VOLT
I	9.7
O	5.0
GND	GND

IC502	
PIN	VOLT
I	5.0
O	3.3
GND	GND
4	3.4

IC504	
PIN	VOLT
I	7.0
O	5.0
GND	GND
4	N/C

IC505	
PIN	VOLT
I	11.0
O	9.0
GND	GND
4	2.3

IC508	
PIN	VOLT
1	1.6
2	0.1
3	GND
4	0.1
5	1.6
6	7.9
7	11.0
8	5.1
9	24.0
10	0.0
11	4.4
12	10.6

IC901	
PIN	VOLT
I	11.0
O	5.0
GND	GND

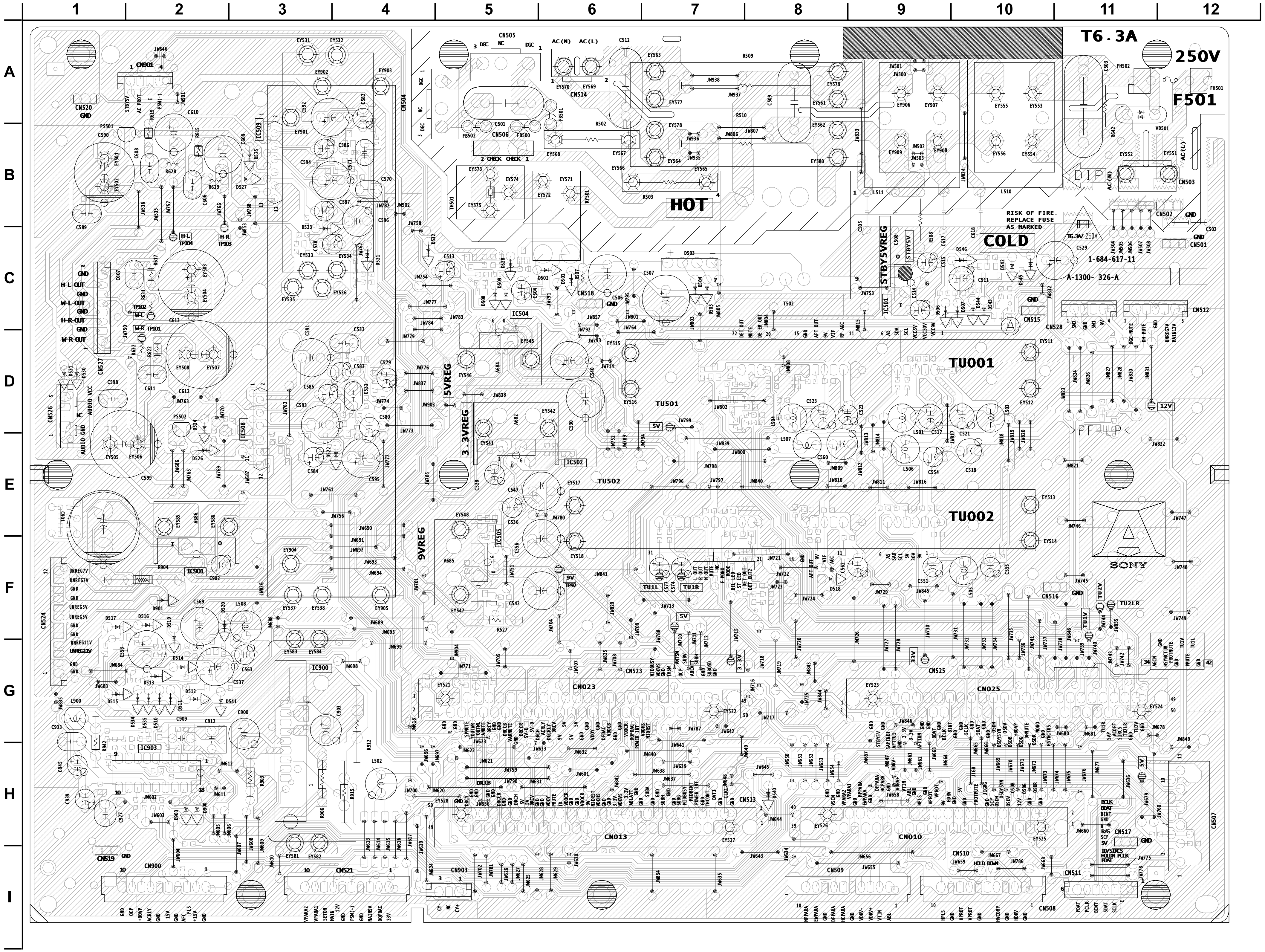
All voltages are in V.

A BOARD
TRANSISTOR VOLTAGE LIST

	B	C	E
Q503	21.2	0.2	21.3
Q504	3.9	GND	4.5
Q505	10.0	0.1	11.0
Q506	3.5	0.5	3.3
Q507	0.1	2.3	GND
Q509	0.7	0.1	GND
Q510	12.0	0.0	12.0
Q511	0.1	7.5	GND
Q512	3.3	0.5	3.3
Q513	0.0	9.0	0.0
Q514	5.9	GND	6.5
Q517	0.0	4.4	GND
Q518	0.0	0.0	GND
Q519	0.0	0.0	GND
Q520	9.7	0.0	9.7
Q521	9.7	0.0	9.7
Q524	0.7	0.1	GND
Q527	9.8	0.0	5.0
Q528	0.7	0.0	GND

All voltages are in V.

A [AC/DC POWER, AUDIO POWER, TUNER] [COMPONENT SIDE]


1
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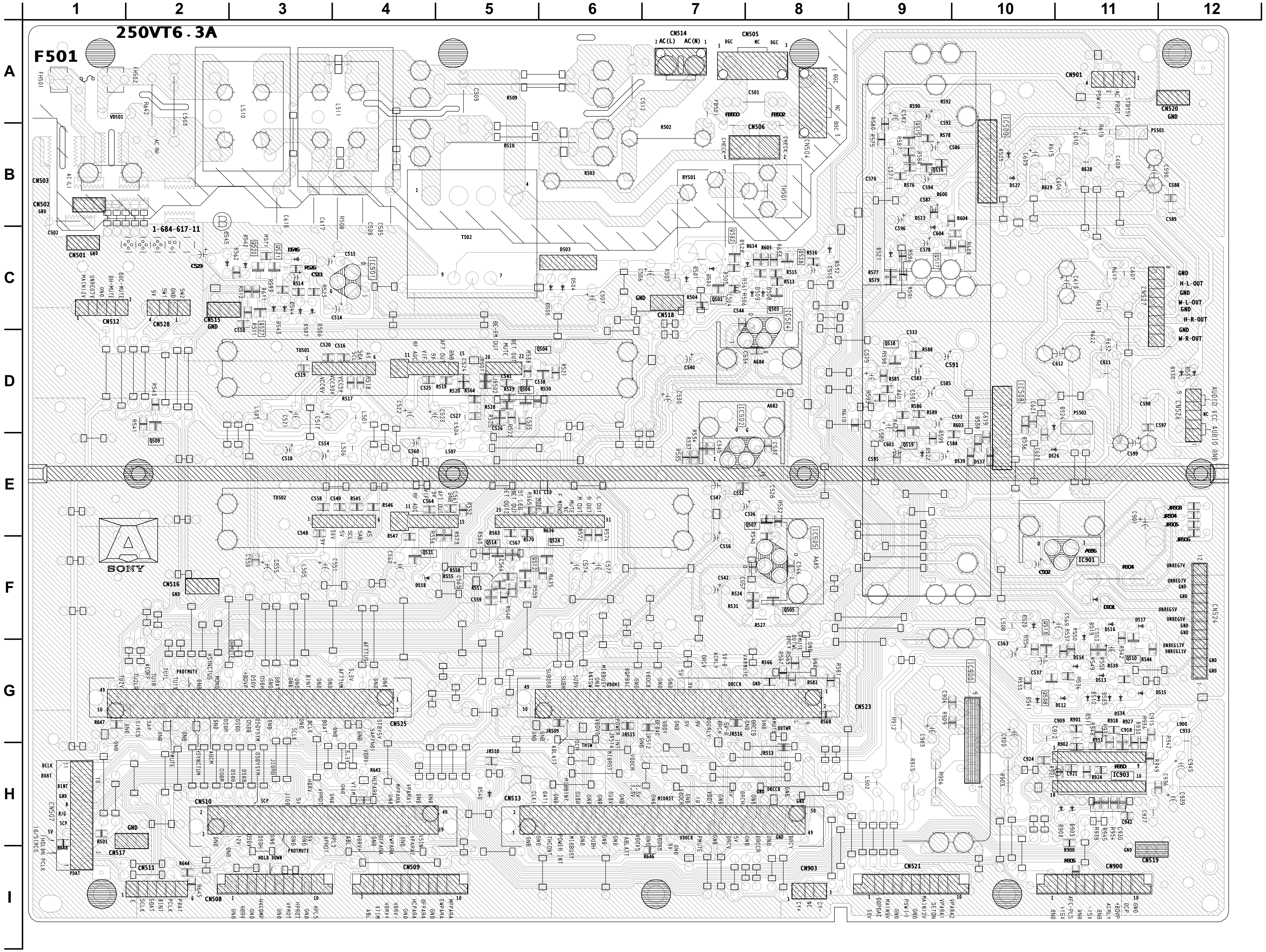
11
12
A
B
C
D
E
F
G
H
I
T6.3A
250V
F501
HOT
COLD
RISK OF FIRE.
REPLACE FUSE
AS MARKED.
T6.3A 250V
1-684-617-11
A-1300-326-A
TU001
TU002
TU501
TU502
5VREG
3.3VREG
9VREG
STBY5VREG
CN023
CN025
CN013
CN010
CN900
CN521
CN903
CN509
CN510
CN511
CN507
CN508
CN524
CN526
CN527
CN520
CN519
CN505
CN514
CN503
CN501
CN502
CN512
CN515
CN516
CN517
CN518
CN525
CN523
CN513
CN528
IC900
IC901
IC903
IC502
IC504
IC505
IC506
IC509
IC501
SONY
12V
5V
9V
3.3V
33V
TU2V
TU1V
TU2LR
TU1L
TU1R
GND
H-L-OUT
W-L-OUT
H-R-OUT
W-R-OUT
AUDIO VCC
AUDIO GND

A [AC/DC POWER, AUDIO POWER, TUNER] [CONDUCTOR SIDE]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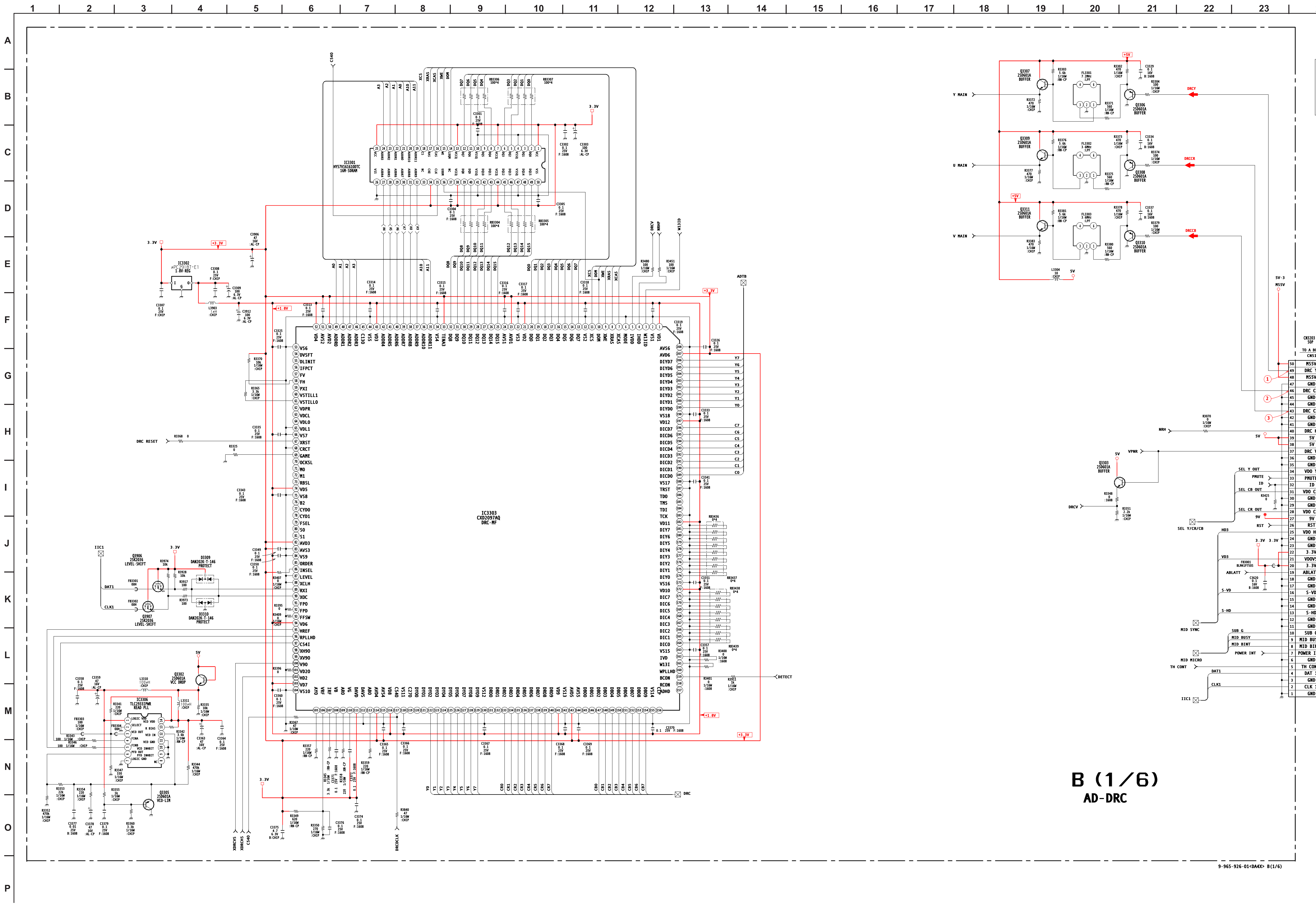
11
12
A
B
C
D
E
F
G
H
I
250VT6.3A
F501
1-684-617-11
SONY
CN514
CN505
CN901
CN520
CN503
CN502
CN501
CN512
CN528
CN515
CN518
CN506
CN527
CN526
CN516
CN525
CN523
CN524
CN507
CN510
CN513
CN517
CN511
CN508
CN509
CN903
CN521
CN900
CN519
T502
IC501
IC502
IC504
IC505
IC508
IC901
IC900
IC903
TU501
TU502

A BOARD LOCATOR LIST

IC		DIODE	
IC501	C-4	D503	C-6
IC502	D-8	D504	C-6
IC504	C-8	D505	C-6
IC505	E-8	D508	C-8
IC508	D-10	D509	C-8
IC901	F-11	D510	G-11
TRANSISTOR		D511	G-11
Q503	C-8	D515	G-11
Q504	D-6	D516	F-11
Q505	F-8	D517	F-11
Q506	D-5	D519	F-11
Q507	E-8	D520	F-10
Q509	E-2	D521	C-9
Q510	G-11	D522	E-9
Q511	F-4	D524	D-11
Q512	F-6	D526	E-11
Q513	F-10	D528	C-7
Q514	F-5	D529	C-7
Q517	C-9	D530	D-12
Q518	D-9	D531	D-12
Q519	E-9	D534	G-11
Q520	C-3	D535	G-11
Q521	C-3	D540	H-5
Q524	F-6	D541	G-10
Q527	C-3	D542	C-3
Q528	C-8	D543	C-3
		D544	C-3
		D545	C-3
		D546	C-3
		D901	F-11

B BOARD SCHEMATIC DIAGRAM (1 OF 6)

The B board is not field repairable. If service is required, use the following part number to order a complete replacement board.
A-1300-407-A B Board, Complete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11
12
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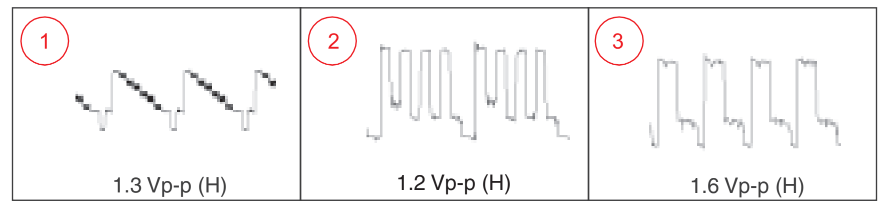
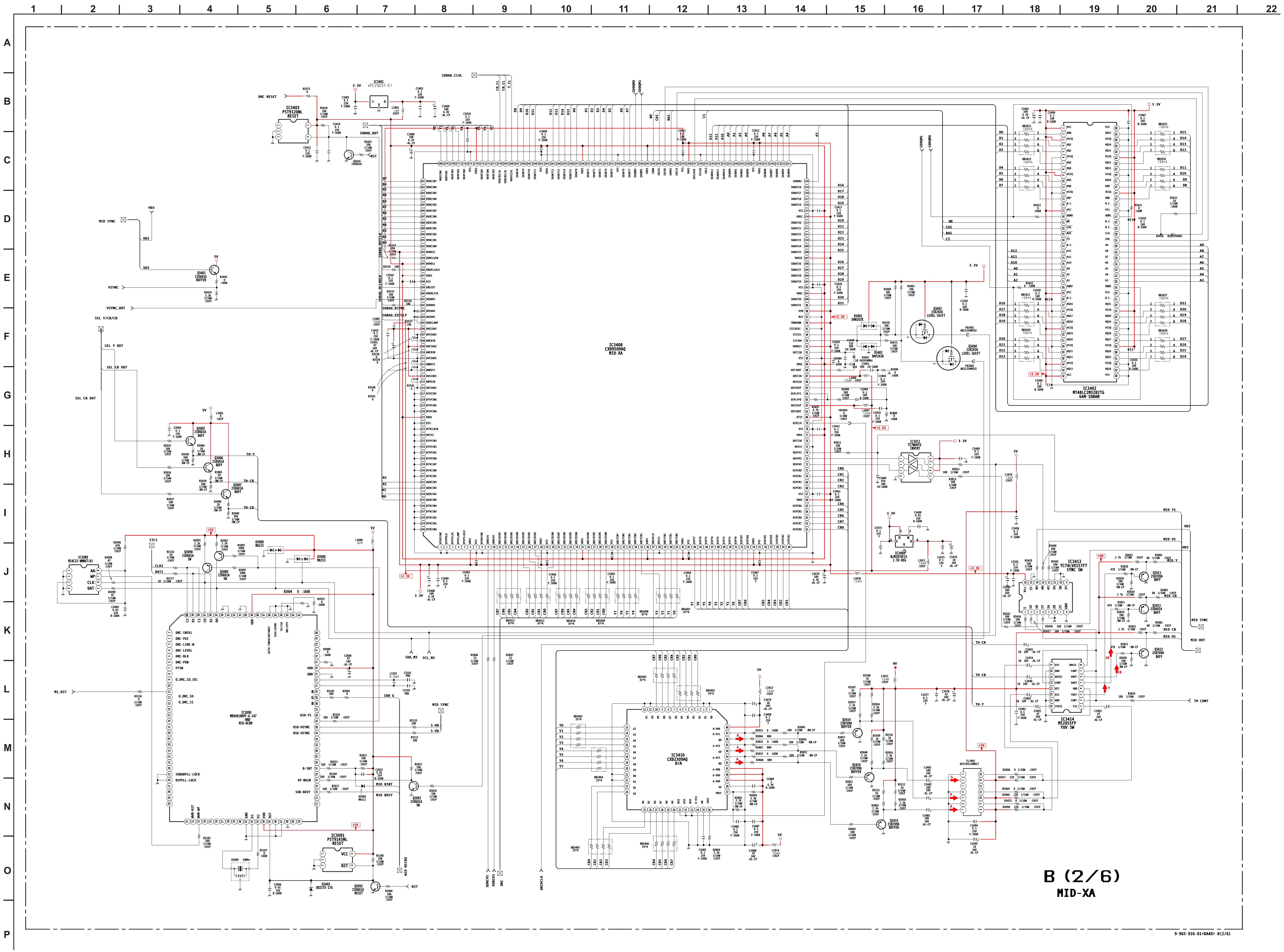
16
17
18
19
20
21
22
23
24
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
IC3301
HY57V161610DTC
16M-SDRAM
IC3302
μPC29L18T-E1
1.8V REG
IC3303
CXD2097AQ
DRC-MF
IC3306
TL29331PWR
READ PLL
Q3305
2SD601A
VCO-LIN
Q3302
2SD601A
VCC DROP
Q3306
2SK2036
LEVEL-SHIFT
Q3307
2SK2036
LEVEL-SHIFT
D3309
DAN202K-T-146
PROTECT
D3310
DAN202K-T-146
PROTECT
Q3303
2SD601A
BUFFER
Y MAIN
U MAIN
V MAIN
DRCY
DRCCB
DRCCR
DRC RESET
DETECT
DRCV
DRCCLK
ADTB
3.3V
5V
+1.8V
+3.3V
+5V
IIC1
DAT1
CLK1
CN3203
50P
TO A BOARD
CN513
50 MSSV
49 DRC Y
48 MSSV
47 GND
46 DRC CB
45 GND
44 GND
43 DRC CR
42 GND
41 GND
40 DRC H
39 5V
38 5V
37 DRC V
36 GND
35 GND
34 VDO Y
33 PMUTE
32 ID
31 VDO CB
30 GND
29 GND
28 VDO CR
27 9V
26 RST
25 VDO HS
24 GND
23 GND
22 3.3V
21 VDOVS
20 3.3V
19 ABLATT
18 GND
17 GND
16 S-VD
15 GND
14 GND
13 S-HD
12 GND
11 GND
10 SUB G
9 MID BUSY
8 MID BINT
7 POWER INT
6 GND
5 TH CONT
4 DAT 1
3 GND
2 CLK 1
1 GND
SEL Y OUT
SEL CB OUT
SEL CR OUT
SEL Y/CR/CB
MID SYNC
MID MICRO
TH CONT
B (1/6)
AD-DRC
9-965-926-01<DA4X> B(1/6)

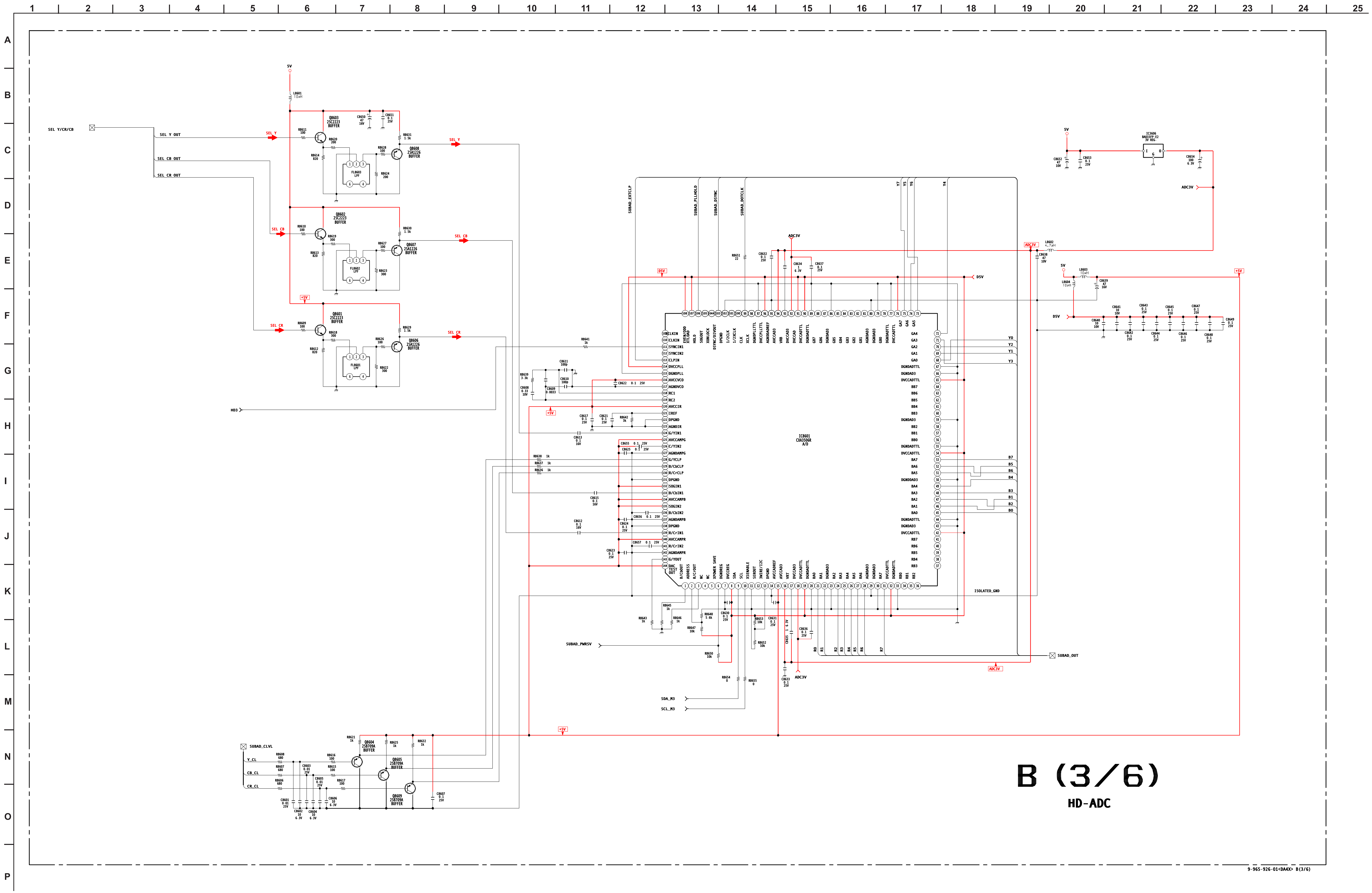
B BOARD WAVEFORMS



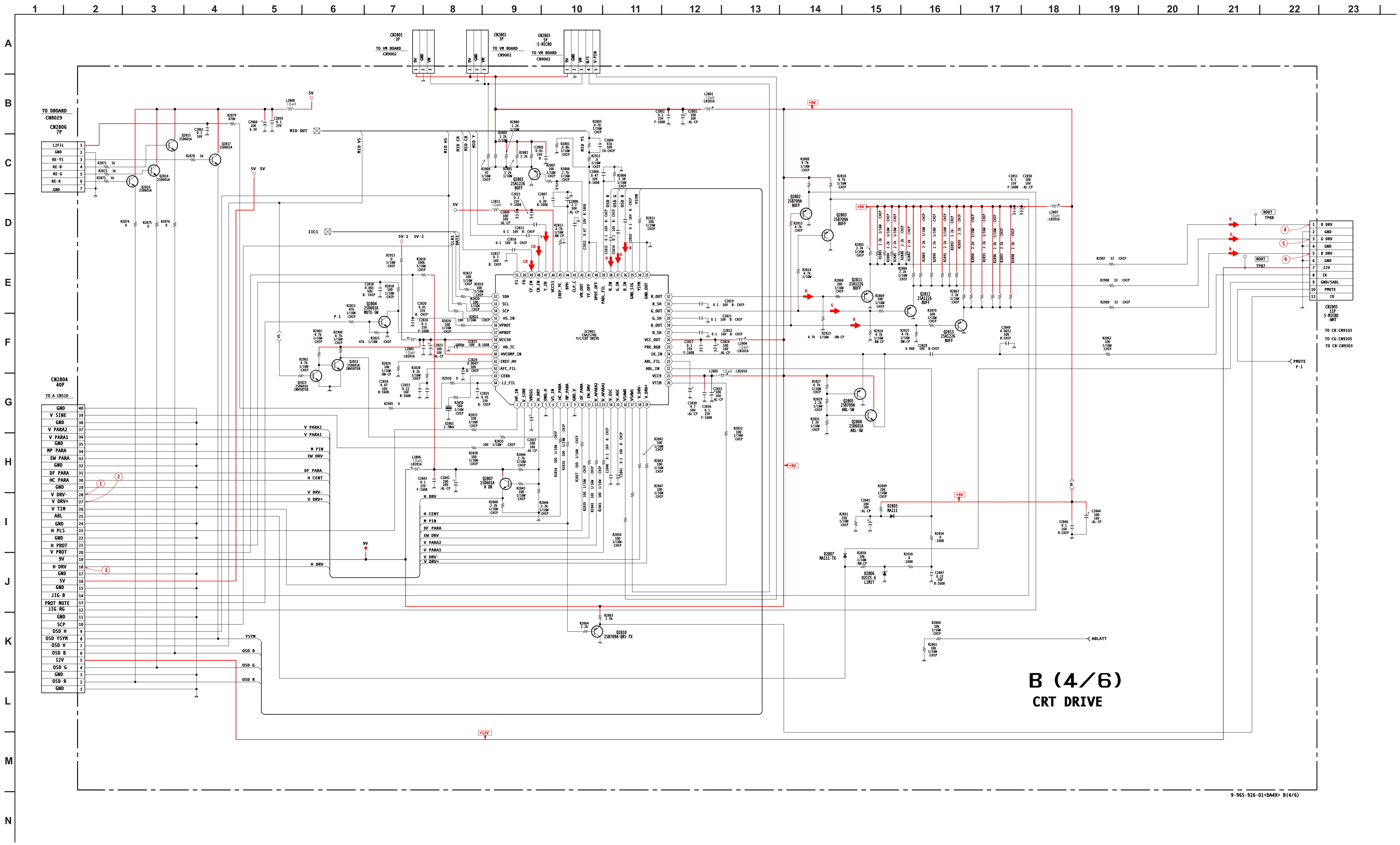
B BOARD SCHEMATIC DIAGRAM (2 OF 6)


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
A B C D E F G H I J K L M N O P
IC3403 PST9120NL RESET
IC3401 uPC29251T-E1
IC3408 CXD9509AQ MID-XA
IC3402 MT48LC2M32B2TG 64M-SDRAM
IC3410 CXD2309AQ D/A
IC3090 M30451B8FP-G-147 MID-UCOM
IC3091 PST9143NL RESET
IC3411 TC7W04FU INVERT
IC3413 TC74LVX157FT SYNC SW
IC3414 MS2055FP YUV SW
Q3401 LEVEL SHIFT
Q3404 LEVEL SHIFT
DRC RESET
MID SYNC
VSYNC
VSYNC_OUT
SEL Y/CR/CB
SEL Y OUT
SEL CB OUT
SEL CR OUT
MS_RST
SUBAD_CLVL
SUBAD_OUT
MID VS
MID HS
MID CR
MID CB
MID Y
MID OUT
TH CONT
B (2/6)
MID-XA
9-965-926-01<DA4X> B(2/6)

B BOARD SCHEMATIC DIAGRAM (3 OF 6)


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25
A B C D E F G H I J K L M N O P
SEL Y/CB/CB
SEL Y OUT
SEL CB OUT
SEL CR OUT
5V
L8601 10µH
Q8603 2SC2223 BUFFER
C8650 47 16V
C8651 0.1 25V
SEL Y
R8611 100
R8620 200
R8614 820
FL8603 LPF
R8631 1.5k
R8628 100
R8624 200
Q8608 2SA1226 BUFFER
Q8602 2SC2223 BUFFER
SEL CB
R8610 100
R8619 300
R8613 820
FL8602 LPF
R8630 1.5k
R8627 100
R8623 300
Q8607 2SA1226 BUFFER
+5V
Q8601 2SC2223 BUFFER
SEL CR
R8609 100
R8618 300
R8612 820
FL8601 LPF
R8629 1.5k
R8626 100
R8622 300
Q8606 2SA1226 BUFFER
HD3
R8641 1k
R8639 3.3k
C8608 0.33 10V
C8609 0.0033
C8611 100p
C8610 100p
C8622 0.1 25V
C8617 0.1 25V
C8621 0.1 25V
R8642 3k
C8613 0.1 16V
C8655 0.1 25V
C8625 0.1 25V
R8638 1k
R8637 1k
R8636 1k
C8615 0.1 16V
C8656 0.1 25V
C8624 0.1 25V
C8612 0.1 16V
C8657 0.1 25V
C8623 0.1 25V
SUBAD_EXTCLP
SUBAD_PLLHOLD
SUBAD_DSYNC
SUBAD_DOTCLK
Y7 Y5 Y6 Y4
ADC3V
R8651 22
C8632 0.1 25V
C8634 1 6.3V
C8637 0.1 25V
D5V
IC8601 CXA3506R A/D
XCLKIN CLKIN SYNCIN1 SYNCIN2 CLPIN DVCCPLL DGNDPLL AVCCVCO AGNDVCO RC1 RC2 AVCCIR IREF DPGND AGNDIR G/YIN1 AVCCAMPG C/YIN2 AGNDAMPG G/YCLP B/CbCLP R/CrCLP DPGND SOGIN1 B/CbIN1 AVCCAMPB SOGIN2 B/CbIN2 AGNDAMPB DPGND R/CrIN1 AVCCAMPR R/CrIN2 AGNDAMPR G/YOUT DAC TEST OUT
EVEN/ODD XTLOAD HOLD SOGOUT XUNLOCK DSYNC/DIVOUT DPGND 1/2CLK 1/2XCLK CLK XCLK DGNDPLLTTL DVCCPLLTTL AGNDDADREF AVCCAD3 VRB DVCCAD3 DVCCAD DVCCADTTL DGNDADTTL GB7 GB6 DGNDAD3 GB5 GB4 GB3 GB2 GB1 AGNDAD3 DGNDAD3 GB0 DGNDADTTL DVCCADTTL GA7 GA6 GA5
GA4 GA3 GA2 GA1 GA0 DGNDADTTL DGNDAD3 DVCCADTTL BB7 BB6 BB5 BB4 BB3 DGNDAD3 BB2 BB1 BB0 DGNDADTTL DVCCADTTL BA7 BA6 BA5 DGNDDAD3 BA4 BA3 BA2 BA1 BA0 DGNDADTTL DGNDAD3 DVCCADTTL RB7 RB6 RB5 RB4 RB3
B/CbOUT ADDRESS R/CrOUT NC NC XPOWER SAVE DGNDREG DVCCREG SDA SCL XSENABLE SEROUT 3WIRE/I2C DPGND AVCCADREF AVCCAD3 VRT DVCCAD3 DVCCADTTL DGNDADTTL RA0 RA1 DGNDAD3 RA2 RA3 RA4 RA5 RA6 AGNDAD3 DGNDAD3 RA7 DVCCADTTL DGNDADTTL RB0 RB1 RB2
Y0 Y2 Y1 Y3
B7 B5 B6 B4 B3 B1 B2 B0
ISOLATED_GND
R8645 1k
R8643 1k
R8646 1k
R8648 5.6k
R8647 10k
C8630 0.1 25V
R8653 10k
C8631 0.1 25V
R8652 10k
C8635 1 6.3V
C8636 0.1 25V
C8633 0.1 25V
R8650 10k
R8654 0
R8655 0
SUBAD_PWRSV
SDA_M3
SCL_M3
R0 R1 R2 R3 R4 R5 R6 R7
SUBAD_OUT
IC3606 BA033FP-E2 3V REG.
I G O
C8652 47 10V
C8653 0.1 25V
C8654 100 6.3V
L8602 4.7µH
C8638 47 10V
L8603 10µH
L8604 10µH
C8639 47 16V
C8640 10 10V
C8641 10 10V
C8642 0.1 25V
C8643 0.1 25V
C8644 0.1 25V
C8645 0.1 25V
C8646 0.1 25V
C8647 0.1 25V
C8648 0.1 25V
C8649 0.1 25V
SUBAD_CLVL
Y_CL
CB_CL
CR_CL
R8608 680
R8607 680
R8606 680
C8601 0.01 25V
C8602 10 6.3V
C8603 0.01 25V
C8604 10 6.3V
C8605 0.01 25V
C8606 10 6.3V
R8616 100
R8615 100
R8617 100
R8621 1k
R8625 1k
R8632 1k
Q8604 2SB709A BUFFER
Q8605 2SB709A BUFFER
Q8609 2SB709A BUFFER
C8607 0.1 25V
B (3/6)
HD-ADC
9-965-926-01<DA4X> B(3/6)

B BOARD SCHEMATIC DIAGRAM (4 OF 6)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A
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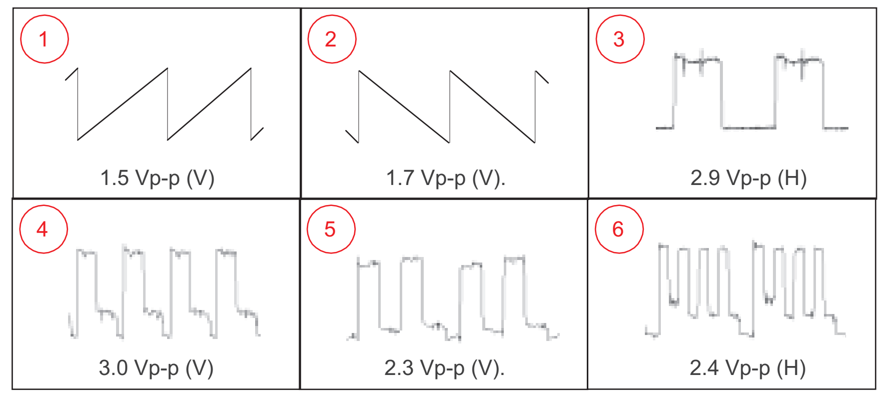
G
H
I
J
K
L
M
N
TO DBOARD
CN8029
CN2806
7P
CN2801
3P
TO VM BOARD
CN9002
CN2802
3P
TO VM BOARD
CN9002
CN2803
5P
:S-MICRO
TO VM BOARD
CN9002
CN2804
40P
TO A CN510
IC2801
CXA2170Q
Y/C/CRT DRIVE
CN2805
11P
S-MICRO
:WHT
TO CR:CN9103
TO CG:CN9205
TO CB:CN9303
MID OUT
+9V
+12V
5V
9V
PMUTE
P.1
ABLATT
B (4/6)
CRT DRIVE
9-965-926-01<DA4X> B(4/6)

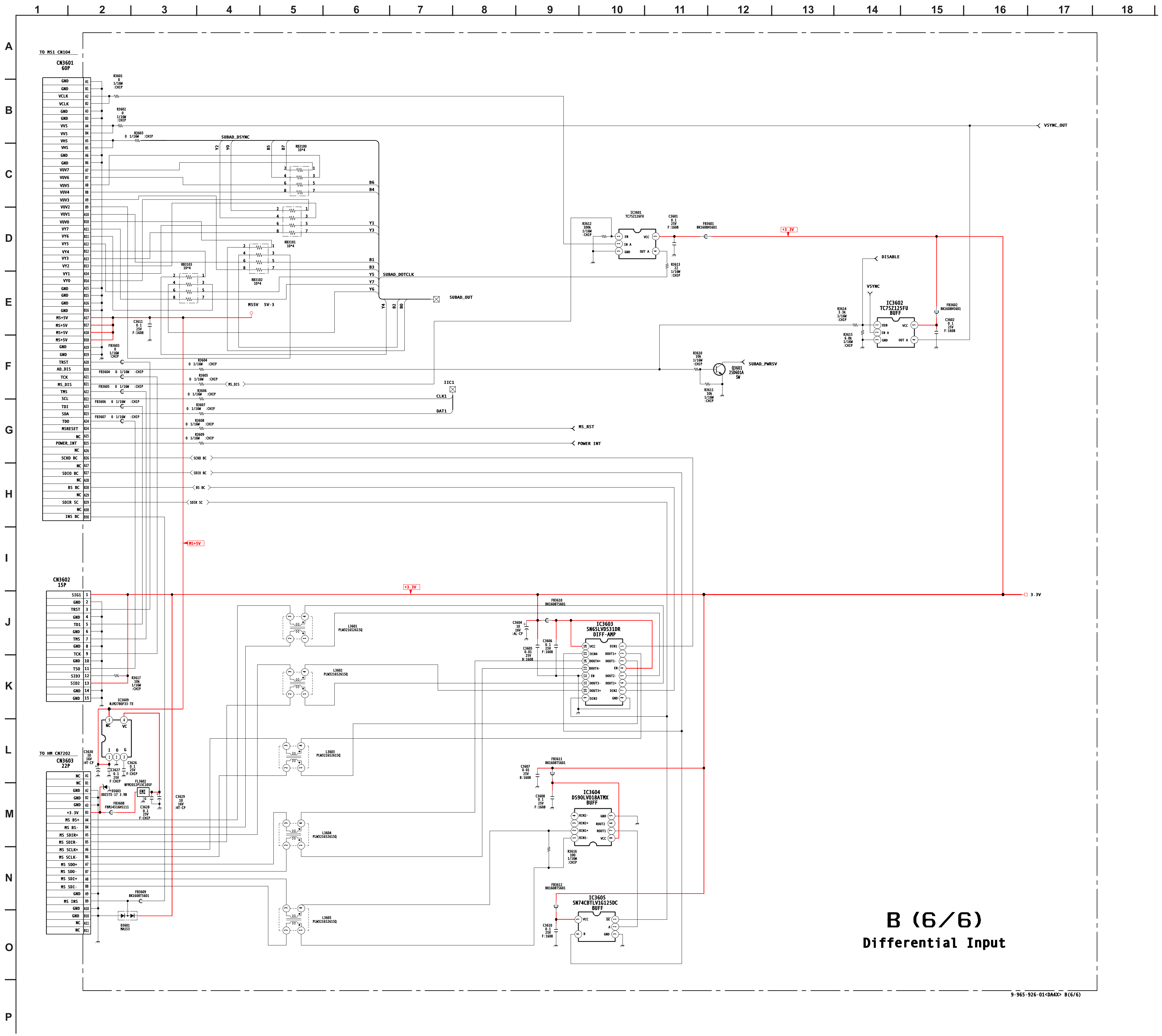
B BOARD WAVEFORMS



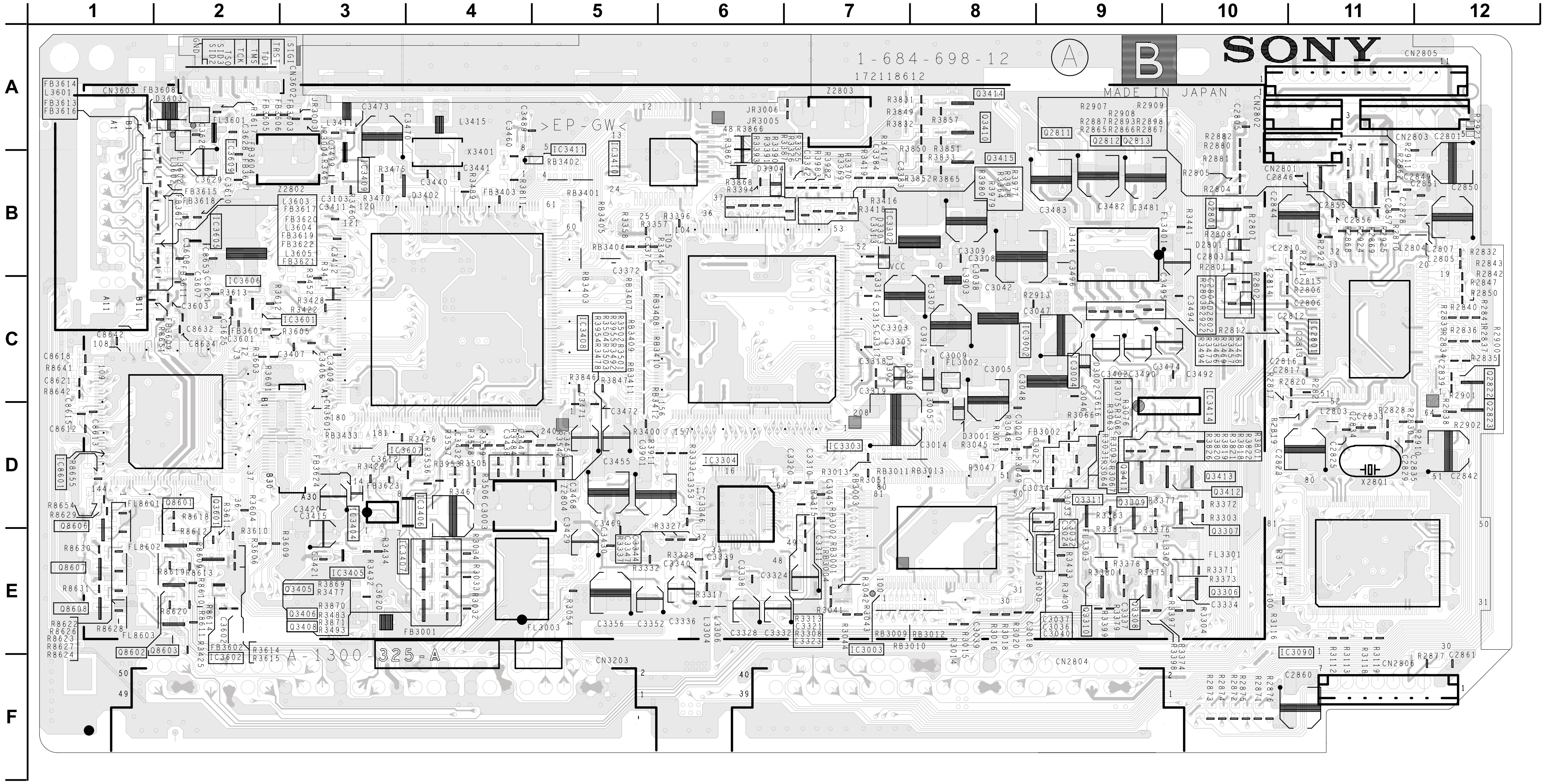
B BOARD SCHEMATIC DIAGRAM (5 OF 6)

IC3001
IS41C16256-35K
SDRAM
IC3003
TC90A90F(BH.DRY)
A/D DNR
IC3608
TLC2932IPWR
WRITE PLL
IC3004
μPC29M05T-E2
5V REG
IC3002
NJM2391DL1-33
FL3001
CKD510JB1A105ST
FL3002
CKD510JB1A105ST
Q3003
2SD601A
Q3008
2SD601A
BUFF
Q3009
2SD601A
VCC-DROP
D3001
MA111
D3002
UDZSTE-173.9B
NRHP
ADTB
W13ID
RST
DRCCR
U MAIN
VPNR
NRH
DRCCB
V MAIN
DRCY
Y MAIN
IIC1
9V
5V-1
5V-2
+5V
+3.3V
3.3V
B (5/6)
A/D (DNR)
9-965-926-01<DA4X> B(5/6)

B BOARD SCHEMATIC DIAGRAM (6 OF 6)


TO MS1 CN104
CN3601
60P
CN3602
15P
TO HM CN7202
CN3603
22P
IC3601
TC7S126FU
IC3602
TC7S125FU
BUFF
IC3603
SN65LVDS31DR
DIFF-AMP
IC3604
DS90LV018ATMX
BUFF
IC3605
SN74CBTLV1G125DC
BUFF
IC3609
NJM2780F33-TE
Q3601
2SD601A
SW
VSYNC_OUT
SUBAD_DSYNC
SUBAD_DOTCLK
SUBAD_OUT
SUBAD_PWR5V
DISABLE
VSYNC
MS_RST
POWER INT
CLK1
DAT1
IIC1
MS+5V
+3.3V
3.3V
B (6/6)
Differential Input
9-965-926-01<DA4X> B(6/6)

B [AD-DRC,MID-XA, HD-ADC, CRT DRIVE, A/D (DNR), DIFFERENTIAL INPUT] [COMPONENT SIDE]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A
B
C
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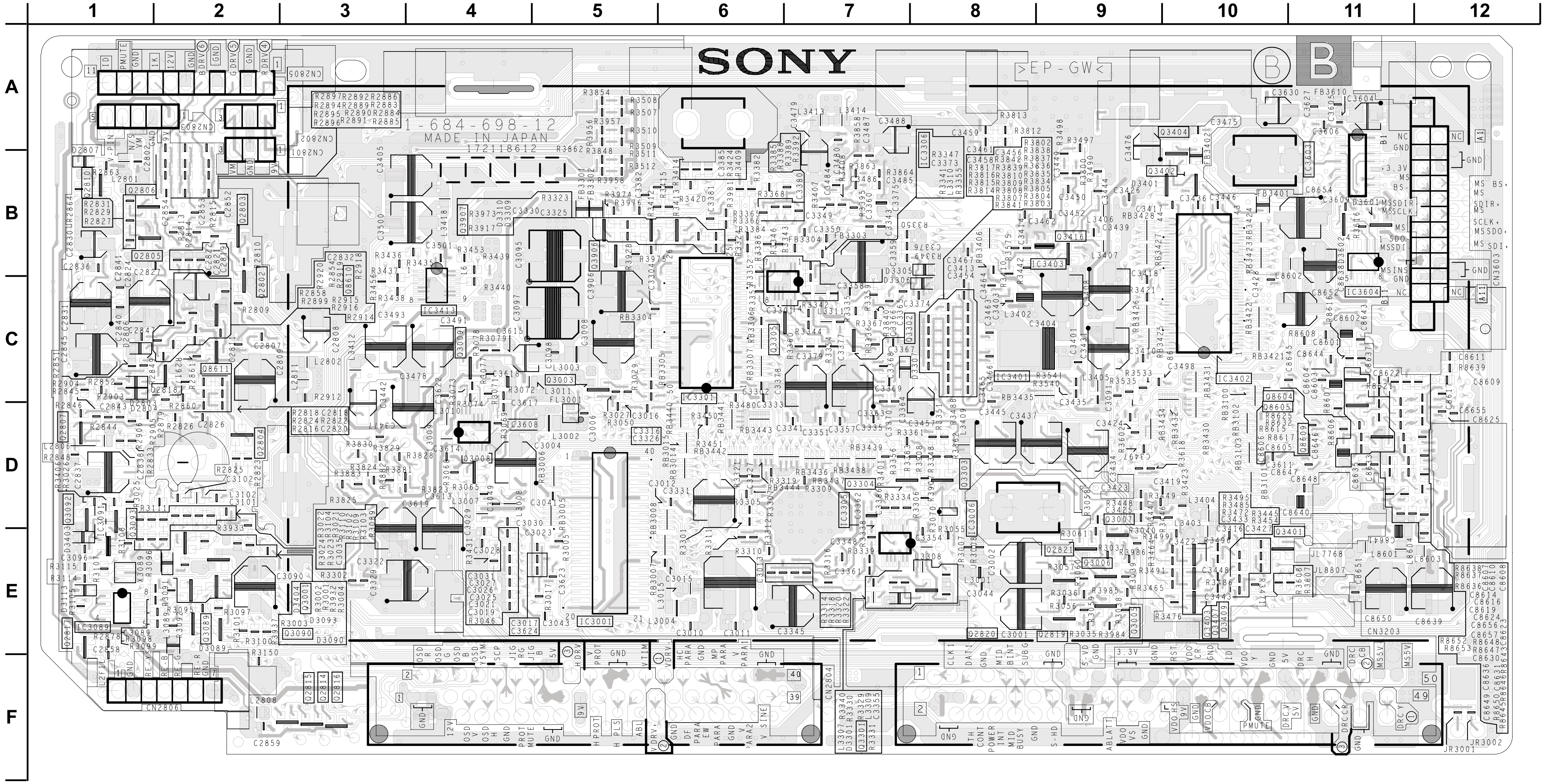
E
F
1-684-698-12
SONY
MADE IN JAPAN
>EP-GW<
A-1300-325-A

B [AD-DRC,MID-XA, HD-ADC, CRT DRIVE, A/D (DNR), DIFFERENTIAL INPUT] [CONDUCTOR SIDE]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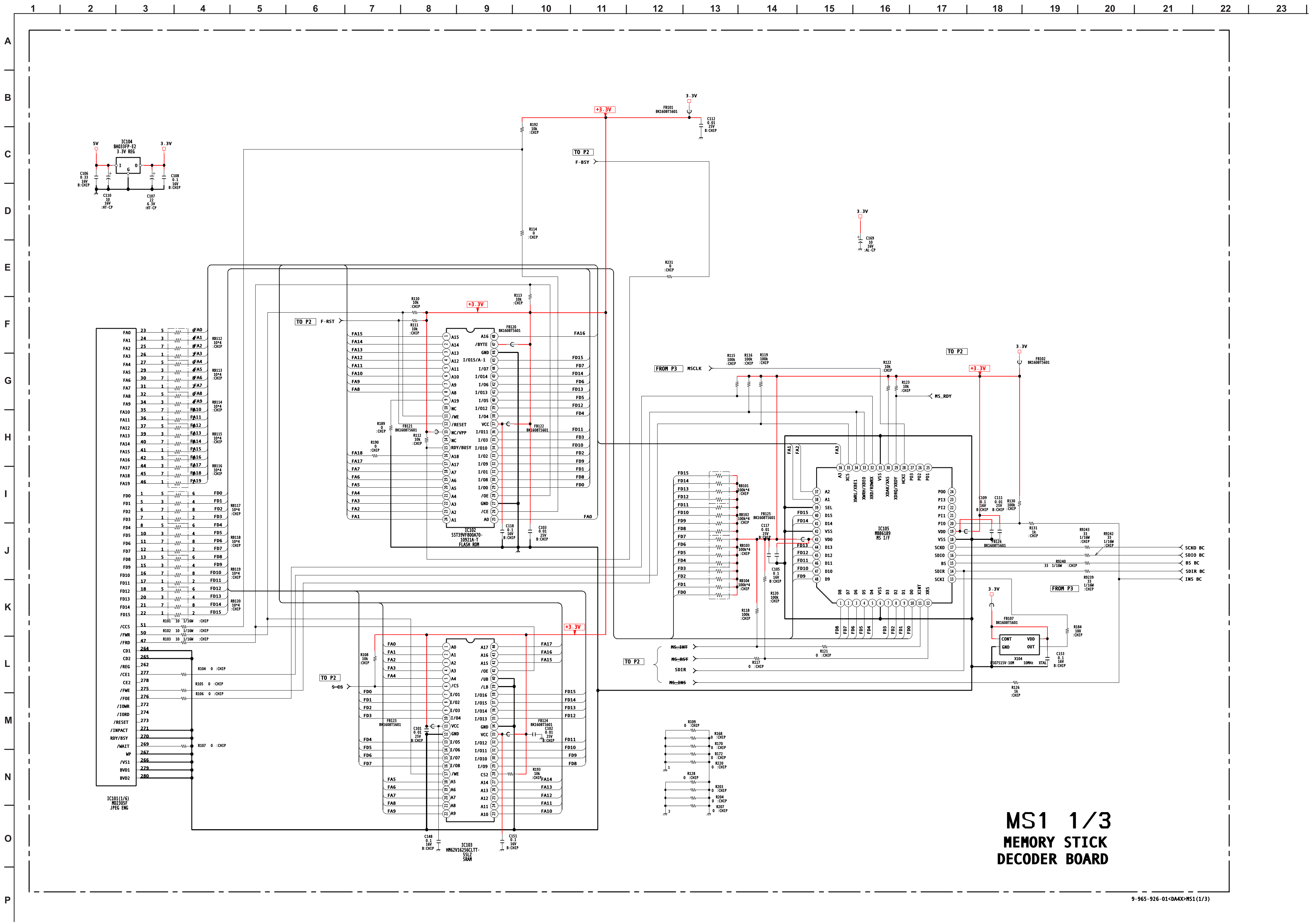
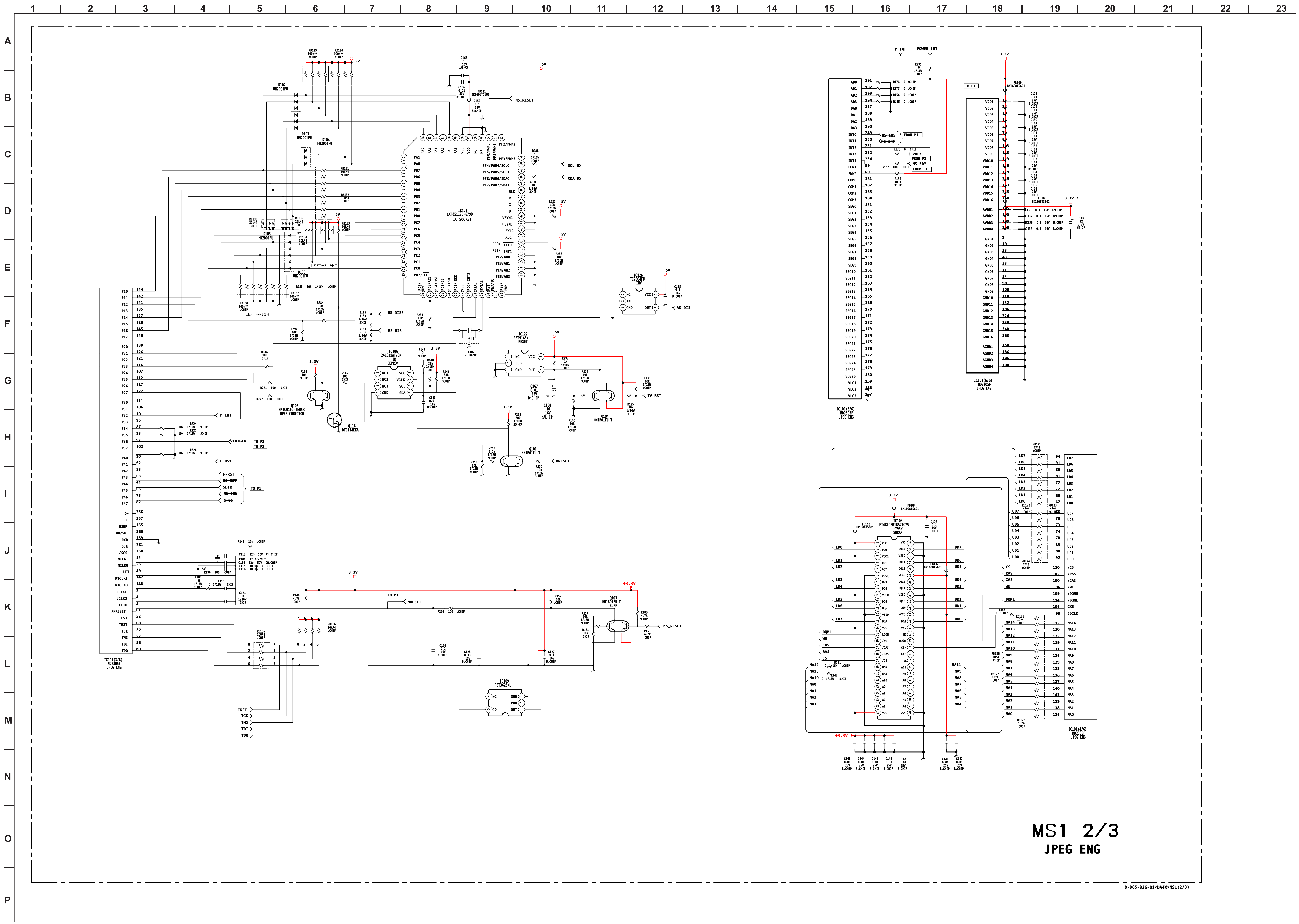
SONY
EP-GW
B
1-684-698-12
MADE IN JAPAN
172118612
CN2806
CN2804
CN3203
CN3603

MS1 BOARD SCHEMATIC DIAGRAM (1 OF 3) The MS1 board is not field repairable. If service is required, use the following part number to order a complete replacement board.

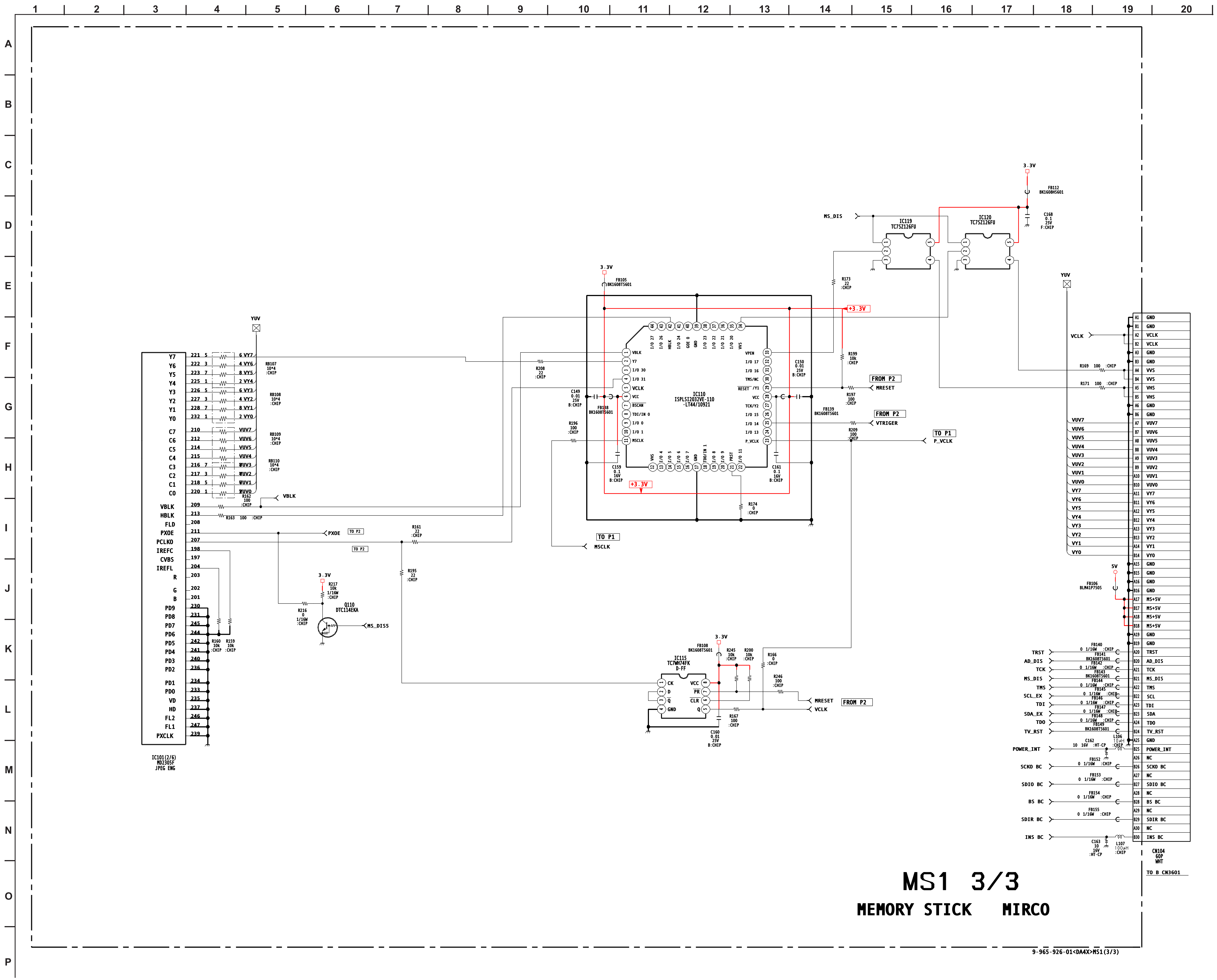
A-1300-408-A MS1 Board, Complete


IC104
BA033FP-E2
3.3V REG
5V
3.3V
C106 0.33 16V B:CHIP
C110 10 16V :HT-CP
C107 22 6.3V :HT-CP
C108 0.1 16V B:CHIP
+3.3V
FB101 BK1608TS601
C112 0.01 25V B:CHIP
R192 10k :CHIP
TO P2
F-BSY
R114 0 :CHIP
R231 0 :CHIP
C169 10 16V :AL-CP
TO P2
F-RST
IC102
SST39VF800A70-
10921A-T
FLASH ROM
C118 0.1 16V B:CHIP
C103 0.01 25V B:CHIP
FB120 BK1608TS601
FB121 BK1608TS601
FB122 BK1608TS601
RB112 10k*4 :CHIP
RB113 10k*4 :CHIP
RB114 10k*4 :CHIP
RB115 10k*4 :CHIP
RB116 10k*4 :CHIP
RB117 10k*4 :CHIP
RB118 10k*4 :CHIP
RB119 10k*4 :CHIP
RB120 10k*4 :CHIP
IC101(1/6)
MD2305F
JPEG ENG
/CCS
/FWR
/FRD
CD1
CD2
/REG
/CE1
CE2
/FWE
/FOE
/IOWR
/IORD
/RESET
/INPACT
RDY/BSY
/WAIT
WP
/VS1
BVD1
BVD2
FROM P3
MSCLK
MS_RDY
TO P2
IC105
MB86189
MS I/F
C109 0.1 16V B:CHIP
C111 0.01 25V B:CHIP
R130 100k :CHIP
FB126 BK1608TS601
FB125 BK1608TS601
C117 0.01 25V B:CHIP
C105 0.1 16V B:CHIP
R120 100k :CHIP
RB101 100k*4 :CHIP
RB102 100k*4 :CHIP
RB103 100k*4 :CHIP
RB104 100k*4 :CHIP
FB102 BK1608TS601
SCKO BC
SDIO BC
BS BC
SDIR BC
INS BC
FROM P3
FB107 BK1608TS601
CONT VDD
GND OUT
X104
DSO751SV-10M 10MHz XTAL
C153 0.1 16V B:CHIP
R184 100 :CHIP
R126 1k :CHIP
TO P2
MS_INF
MS_RST
SDIR
MS_INS
TO P2
S-CS
IC103
HM62V16256CLTT-
5SLZ
SRAM
C148 0.1 16V B:CHIP
C151 0.1 16V B:CHIP
FB123 BK1608TS601
FB124 BK1608TS601
C101 0.01 25V B:CHIP
C102 0.01 25V B:CHIP
R193 10k :CHIP
MS1 1/3
MEMORY STICK
DECODER BOARD
9-965-926-01<DA4X>MS1(1/3)

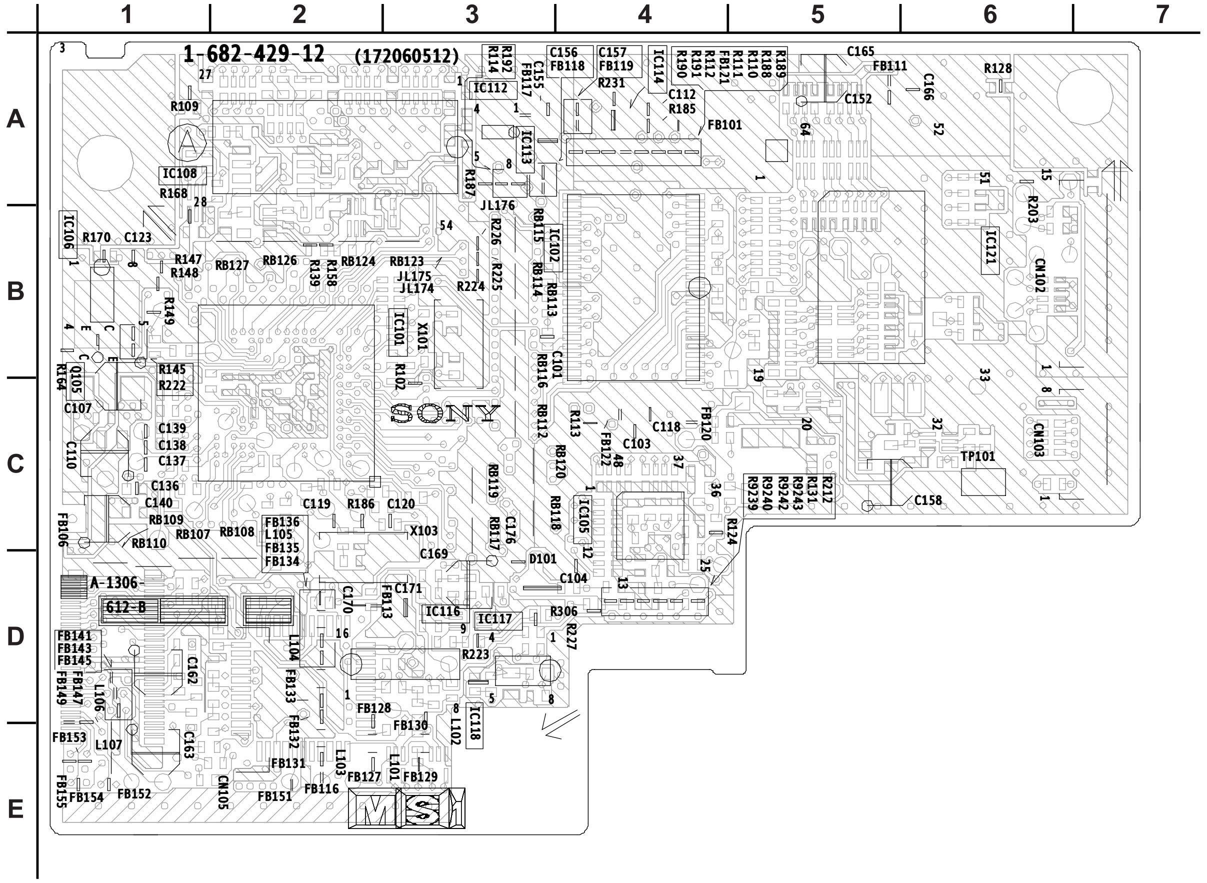
MS1 BOARD SCHEMATIC DIAGRAM (2 OF 3)


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
A B C D E F G H I J K L M N O P
IC121
CXP85112B-079Q
IC SOCKET
IC101(3/6)
MD2305F
JPEG ENG
IC101(5/6)
MD2305F
JPEG ENG
IC101(6/6)
MD2305F
JPEG ENG
IC101(4/6)
MD2305F
JPEG ENG
IC106
24LC21AT/SN
1K
EEPROM
IC108
MT48LC8M16A2TG75
-Y55W
SDRAM
IC122
PST9145NL
RESET
IC126
TC7S04FU
INV
IC109
PST3628NL
MS_RESET
SCL_EX
SDA_EX
AD_DIS
TV_RST
MS_DISS
MS_DIS
P INT
F-BSY
MRESET
POWER_INT
TO P1
TO P3
3.3V
5V
+3.3V
MS1 2/3
JPEG ENG
9-965-926-01<DA4X>MS1(2/3)

MS1 BOARD SCHEMATIC DIAGRAM (3 OF 3)


MS1 3/3
MEMORY STICK MIRCO
IC110
ISPLSI2032VE-110
-LT44/10921
IC119
TC7SZ126FU
IC120
TC7SZ126FU
IC115
TC7WH74FK
D-FF
IC101(2/6)
MD2305F
JPEG ENG
Q110
DTC114EKA
CN104
60P
WHT
TO B CN3601
MS_DIS
VCLK
VBLK
PXOE
MRESET
VTRIGER
P_VCLK
MSCLK
MS_DIS5
FROM P2
TO P1
TO P2
+3.3V
3.3V
5V
YUV
9-965-926-01<DA4X>MS1(3/3)

MS1 [MEMORY STICK, DECODER BOARD, JPEG ENG, MEMORY STICK MICRO] [COMPONENT SIDE]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A
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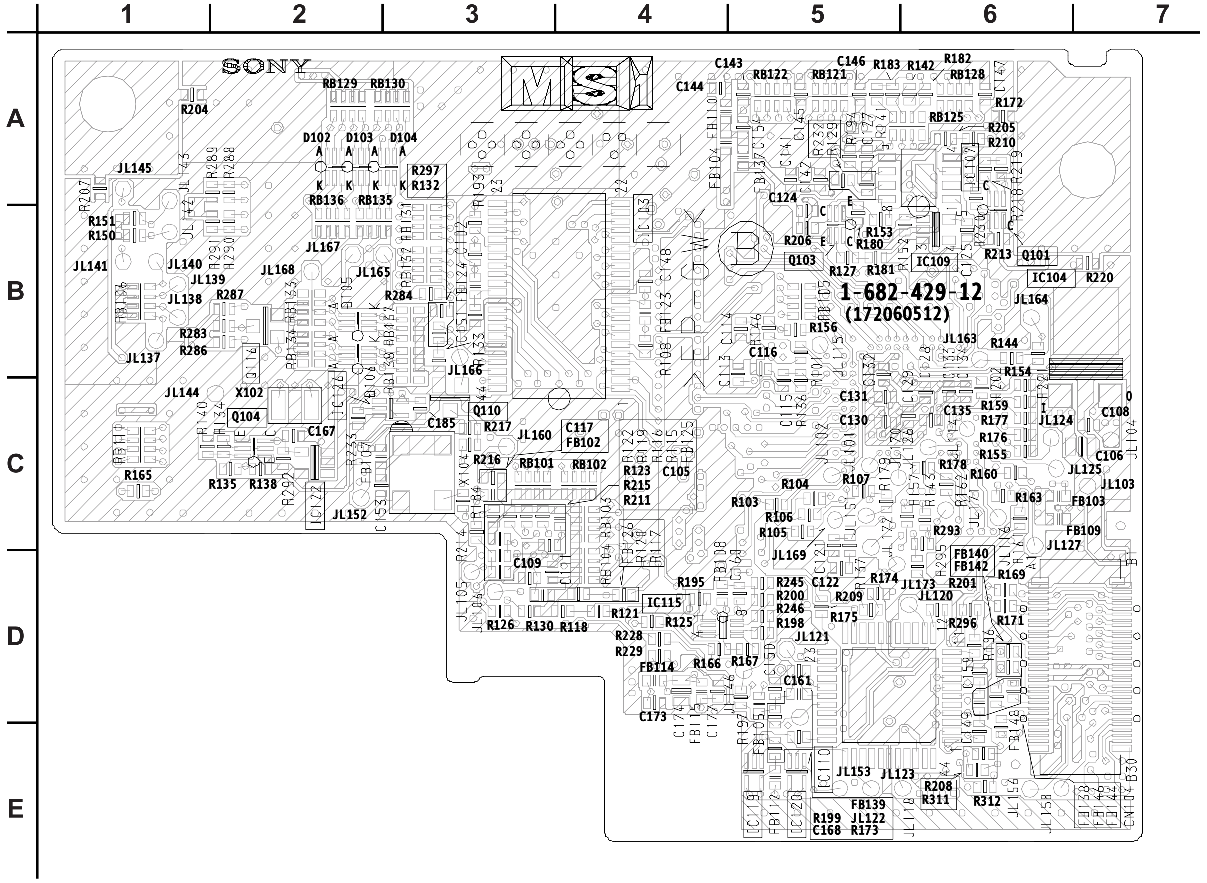
C
D
E
1-682-429-12 (172060512)
SONY
A-1306-612-B
MS1

[CONDUCTOR SIDE]


1
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5
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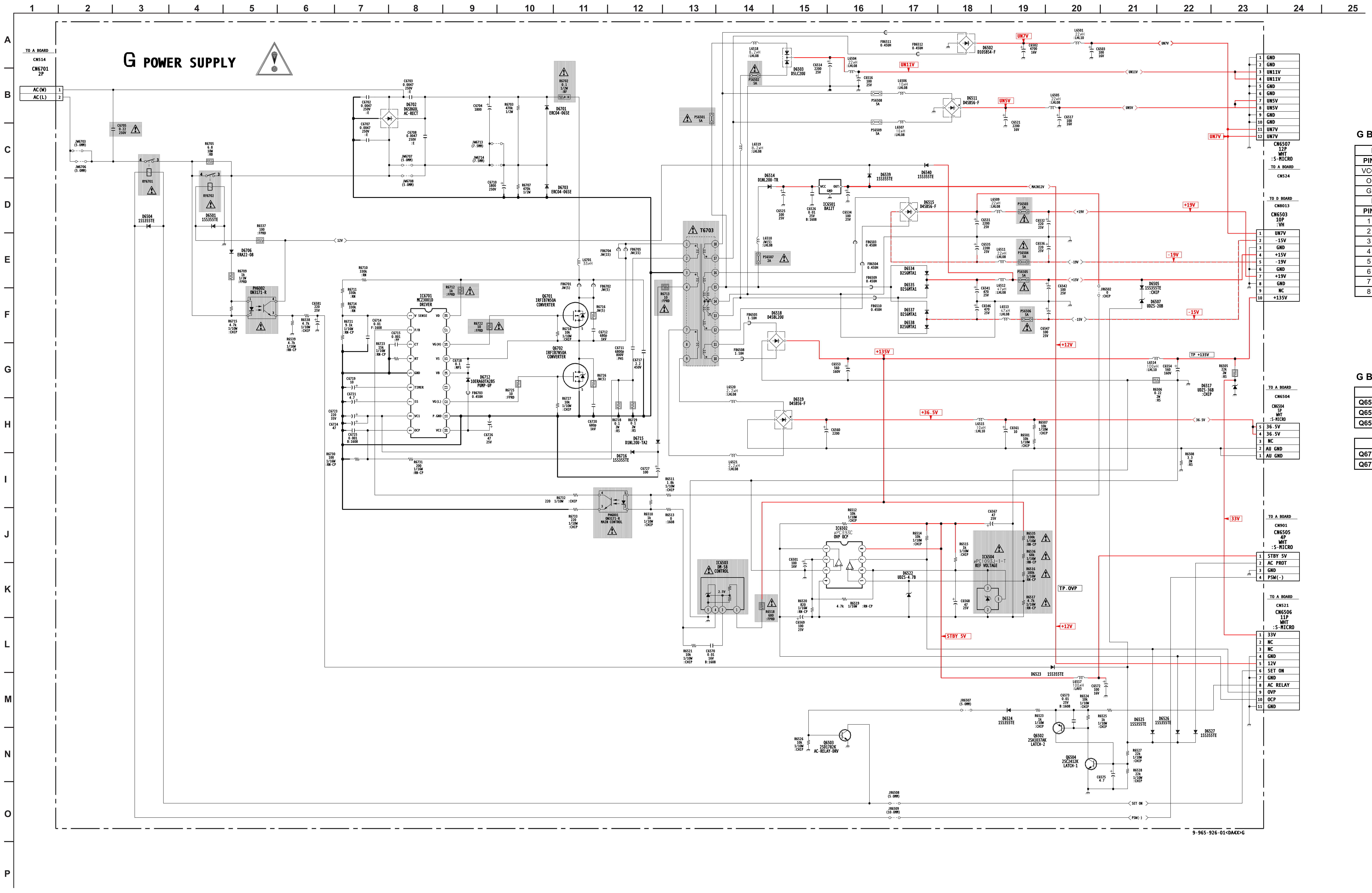
7
A
B
C
D
E
SONY
MS1
1-682-429-12 (172060512)

G BOARD SCHEMATIC DIAGRAM


G POWER SUPPLY
TO A BOARD
CN514
CN6701
2P
AC(W)
AC(L)
RY6701
RY6702
PH6002
ON3171-R
IC6701
MC33001D
DRIVER
Q6701
IRFIB7N50A
CONVERTER
Q6702
IRFIB7N50A
CONVERTER
D6712
1DERA0TA2BS
PUMP-UP
T6703
PH6001
ON3171-R
MAIN CONTROL
IC6503
DM-58
CONTROL
IC6502
μPC393C
OVP OCP
IC6504
μPC1093J-1-T
REF VOLTAGE
IC6501
BA12T
Q6502
2SA1037AK
LATCH-2
Q6503
2SD1782K
AC-RELAY-DRV
Q6504
2SC2412K
LATCH-1
UN7V
UN11V
UN5V
MAIN12V
+19V
-19V
+15V
-15V
+12V
+135V
+36.5V
TP +135V
TP OVP
33V
STBY 5V
SET ON
PSW(-)
1 GND
2 GND
3 UN11V
4 UN11V
5 GND
6 GND
7 UN5V
8 UN5V
9 GND
10 GND
11 UN7V
12 UN7V
CN6507
12P
WHT
:S-MICRO
TO A BOARD
CN524
TO D BOARD
CN8013
CN6503
10P
:VH
1 UN7V
2 -15V
3 GND
4 +15V
5 -19V
6 GND
7 +19V
8 GND
9 NC
10 +135V
TO A BOARD
CN6504
CN6504
5P
WHT
:S-MICRO
5 36.5V
4 36.5V
3 NC
2 AU GND
1 AU GND
TO A BOARD
CN901
CN6505
4P
WHT
:S-MICRO
1 STBY 5V
2 AC PROT
3 GND
4 PSW(-)
TO A BOARD
CN521
CN6506
11P
WHT
:S-MICRO
1 33V
2 NC
3 NC
4 GND
5 12V
6 SET ON
7 GND
8 AC RELAY
9 OVP
10 OCP
11 GND
9-965-926-01<DA4X>G

G BOARD IC VOLTAGE LIST

IC6501		IC6503		3	2.2
PIN	VOLT	PIN	VOLT	4	1.5
VCC	15.0	1	133.7	5	GND
O	12.0	2	N/C	6	0.0
G	GND	3	2.5	7	4.6
IC6502		4	15.9	8	20.1
PIN	VOLT	5	GND	9	0.0
1	-0.2	IC6504		10	10.5
2	0.1	PIN	VOLT	11	GND
3	0.1	1	2.3	12	4.9
4	-0.2	2	0.0	13	N/C
5	2.1	3	2.3	14	155.6
6	2.3	IC6701		15	145.6
7	-0.2	PIN	VOLT	16	150.6
8	5.0	1	2.8	17	N/C
		2	1.9	18	304.5

All voltages are in V.

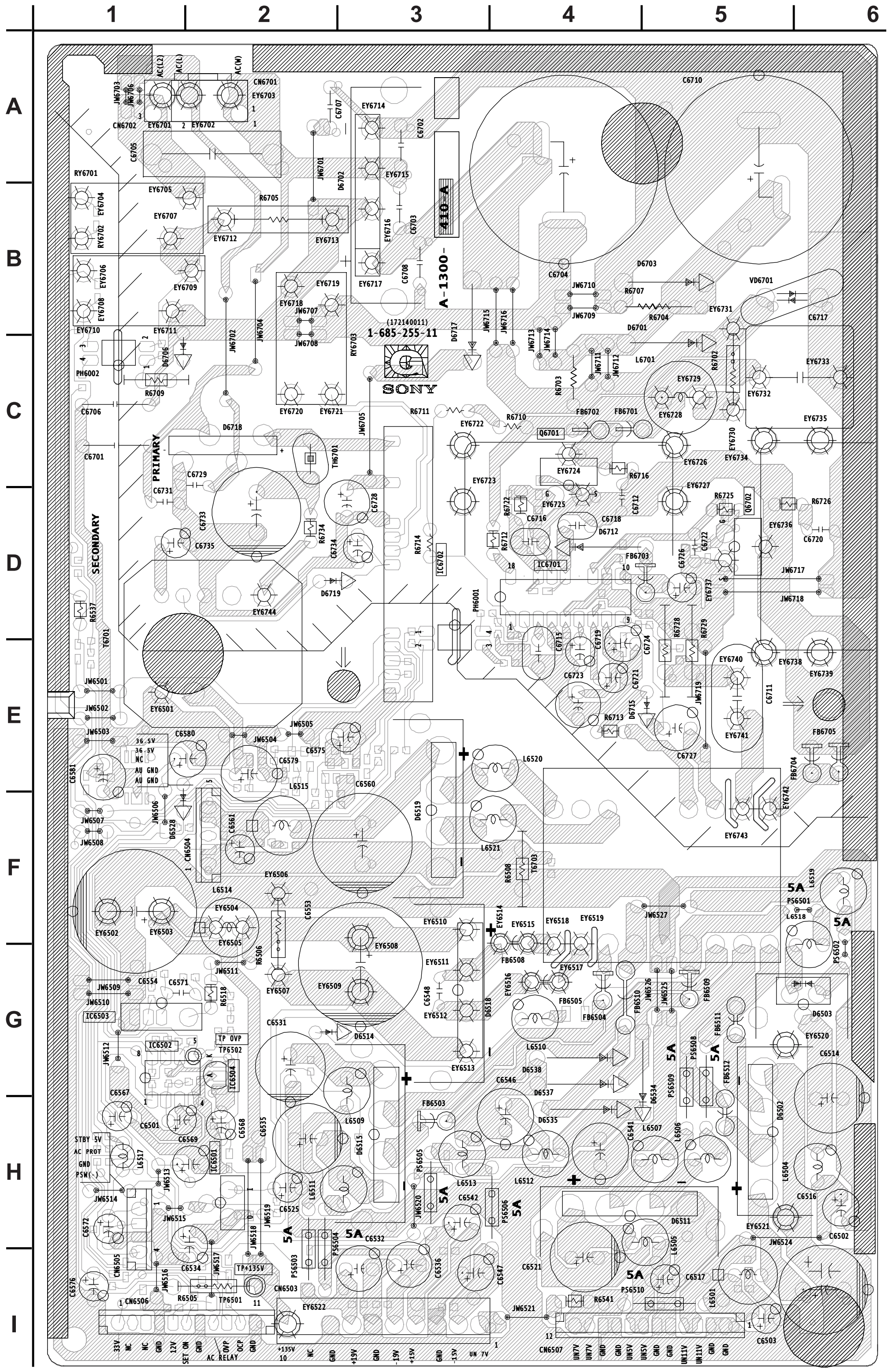
G BOARD TRANSISTOR VOLTAGE LIST

	B	C	E
Q6502	2.2	0	2.2
Q6503	0.7	0.0	GND
Q6504	0.0	2.2	GND

	D	G	S
Q6701	152.0	3.9	-1.5
Q6702	-1.3	-147.5	-152.2

All voltages are in V.

G [POWER SUPPLY] [COMPONENT SIDE]


1
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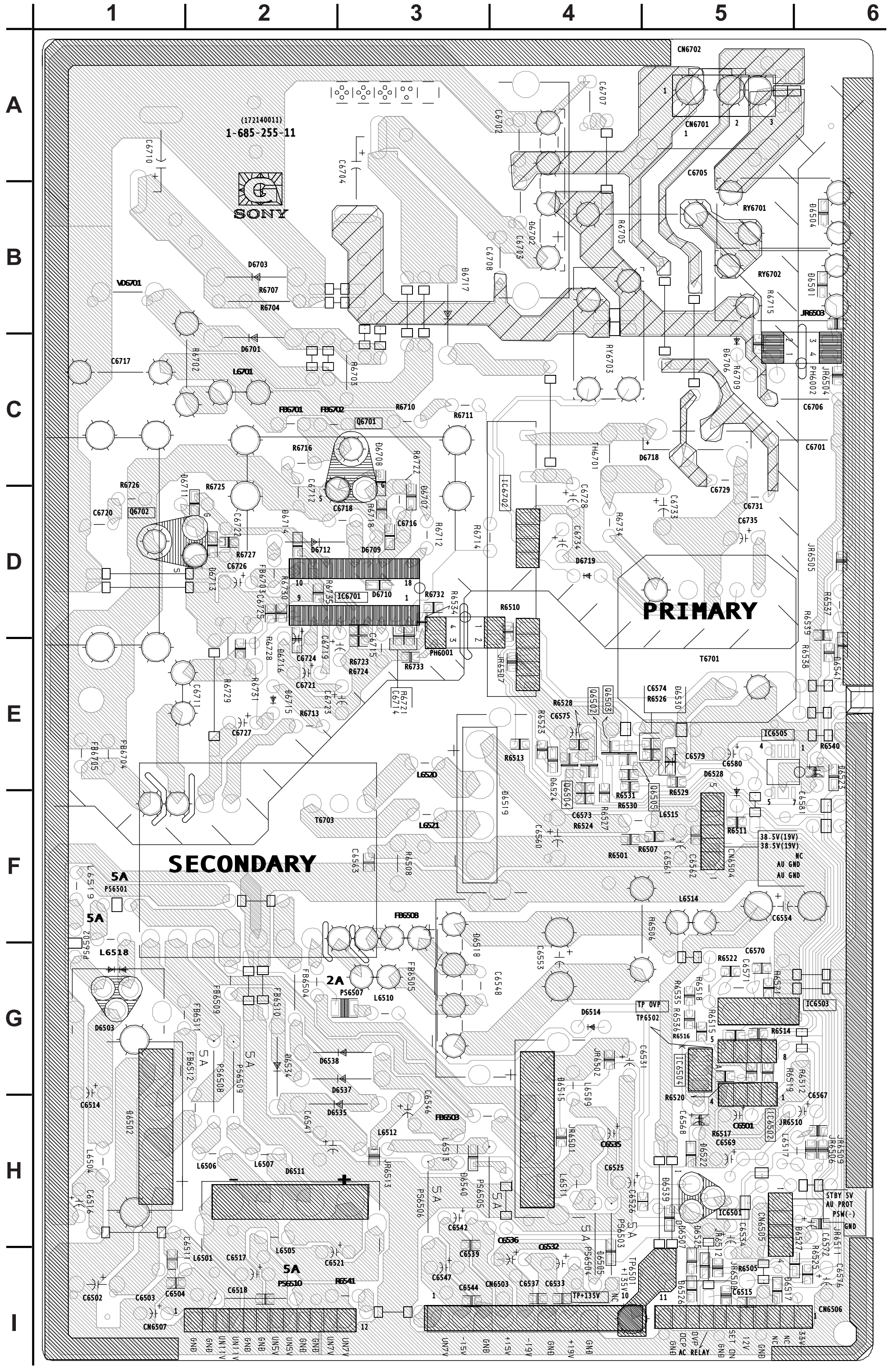
A
B
C
D
E
F
G
H
I
PRIMARY
SECONDARY
SONY
1-685-255-11
A-1300-410-A
5A
2A

[CONDUCTOR SIDE]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E
F
G
H
I
PRIMARY
SECONDARY
SONY
1-685-255-11
5A
2A

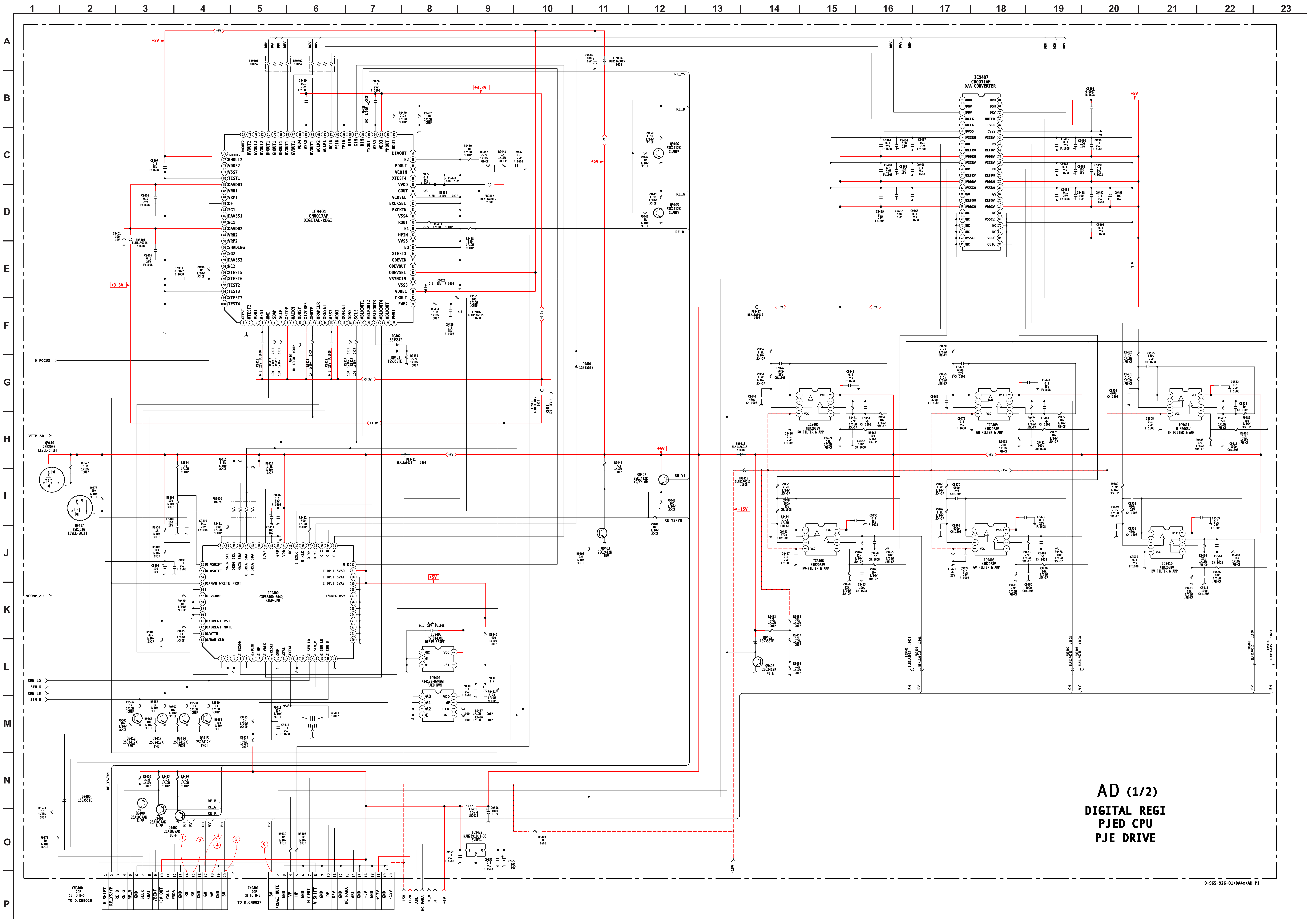
G BOARD

LOCATOR LIST	
IC	
IC6501	H-5
IC6502	H-5
IC6503	G-6
IC6504	G-5
IC6701	D-3
TRANSISTOR	
Q6502	E-4
Q6503	E-4
Q6504	E-4
Q6701	C-3
Q6702	D-1
DIODE	
D6501	B-6
D6502	H-1
D6503	G-1
D6504	B-6
D6505	I-4
D6507	H-5
D6511	H-2
D6514	G-4
D6515	G-4
D6517	I-5
D6518	F-3
D6519	E-3
D6522	H-5
D6523	F-6
D6524	E-4
D6525	H-5
D6526	I-5
D6527	H-6
D6534	G-2
D6535	G-2
D6537	G-2
D6538	G-2
D6539	H-4
D6540	H-3
D6701	C-2
D6702	B-4
D6703	B-2
D6706	B-5
D6712	D-2
D6715	E-2
D6716	E-2

AD BOARD SCHEMATIC DIAGRAM (1 OF 2)

The AD board is not field repairable. If service is required, use the following part number to order a complete replacement board.

A-1300-411-A AD Board, Complete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K
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N
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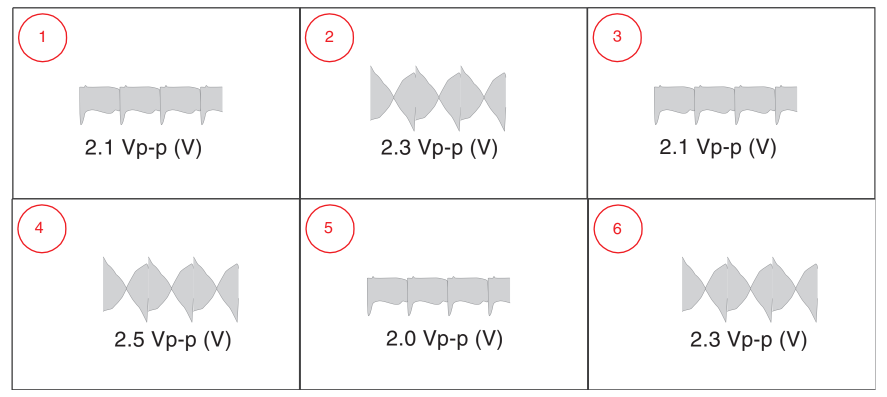
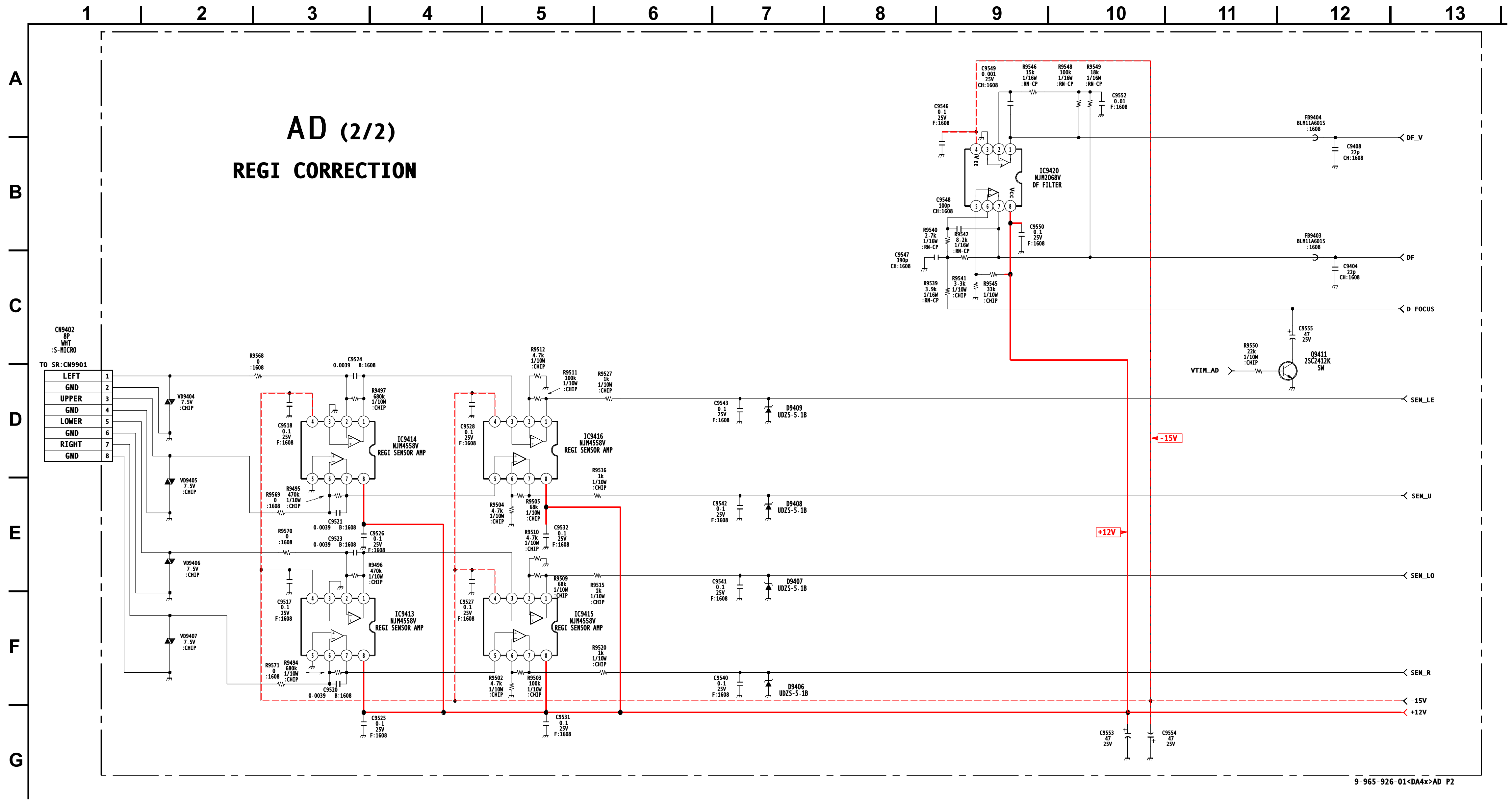
P
IC9401
CM0017AF
DIGITAL-REGI
IC9400
CXP86460-644Q
PJED-CPU
IC9407
CDD031AM
D/A CONVERTER
IC9403
PST9143NL
DEFSV RESET
IC9402
M24128-BWMN6T
PJED NVM
IC9422
NJM2391DL1-33
SVREG
IC9405
NJM2068V
RH FILTER & AMP
IC9409
NJM2068V
GH FILTER & AMP
IC9411
NJM2068V
BH FILTER & AMP
IC9406
NJM2068V
RV-FILTER & AMP
IC9408
NJM2068V
GV FILTER & AMP
IC9410
NJM2068V
BV FILTER & AMP
D FOCUS
VTIM_AD
VCOMP_AD
SEN_LO
SEN_R
SEN_LE
SEN_U
CN9400
TO D:CN8026
CN9401
TO D:CN8027
+5V
+3.3V
-15V
AD (1/2)
DIGITAL REGI
PJED CPU
PJE DRIVE
9-965-926-01<DA4x>AD P1

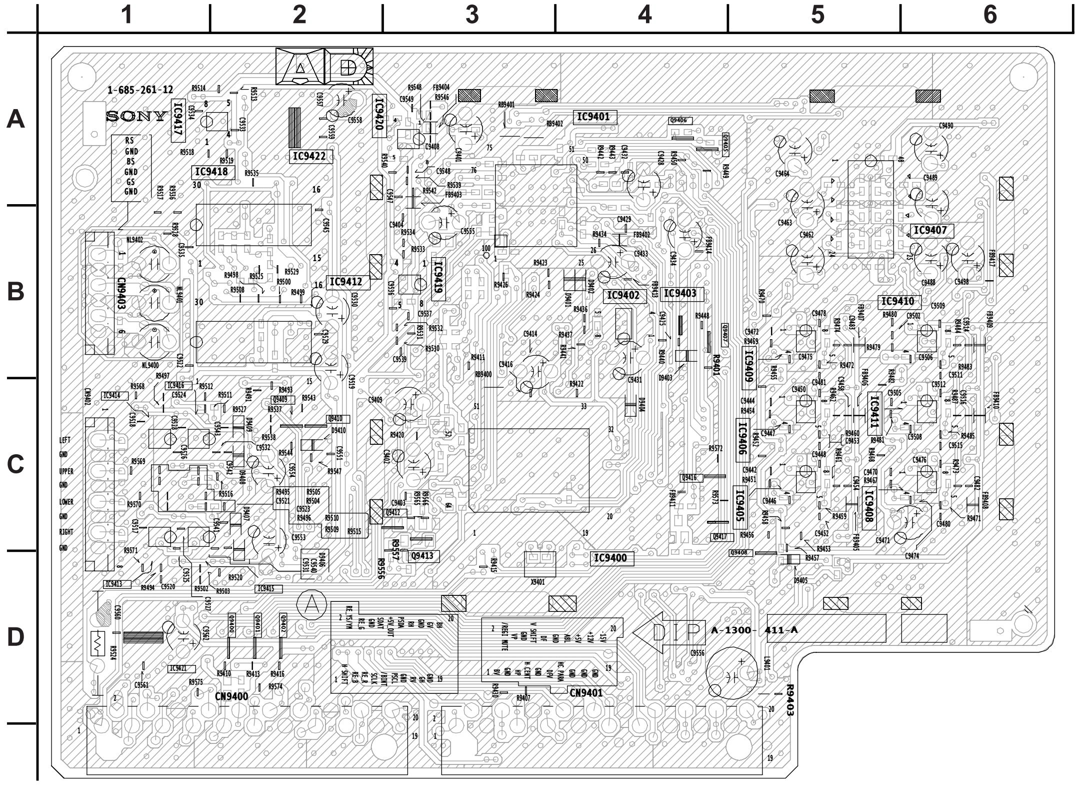
AD BOARD WAVEFORMS



AD BOARD SCHEMATIC DIAGRAM (2 OF 2)


1 2 3 4 5 6 7 8 9 10 11 12 13
A B C D E F G
AD (2/2)
REGI CORRECTION
CN9402 8P WHT :S-MICRO
TO SR:CN9901
LEFT 1
GND 2
UPPER 3
GND 4
LOWER 5
GND 6
RIGHT 7
GND 8
VD9404 7.5V :CHIP
VD9405 7.5V :CHIP
VD9406 7.5V :CHIP
VD9407 7.5V :CHIP
R9568 0 :1608
C9524 0.0039 B:1608
R9497 680k 1/10W :CHIP
C9518 0.1 25V F:1608
IC9414 NJM4558V REGI SENSOR AMP
R9569 0 :1608
R9495 470k 1/10W :CHIP
C9521 0.0039 B:1608
R9570 0 :1608
C9523 0.0039 B:1608
C9526 0.1 25V F:1608
R9496 470k 1/10W :CHIP
C9517 0.1 25V F:1608
IC9413 NJM4558V REGI SENSOR AMP
R9571 0 :1608
R9494 680k 1/10W :CHIP
C9520 0.0039 B:1608
C9525 0.1 25V F:1608
R9512 4.7k 1/10W :CHIP
R9511 100k 1/10W :CHIP
R9527 1k 1/10W :CHIP
C9528 0.1 25V F:1608
IC9416 NJM4558V REGI SENSOR AMP
R9516 1k 1/10W :CHIP
R9504 4.7k 1/10W :CHIP
R9505 68k 1/10W :CHIP
R9510 4.7k 1/10W :CHIP
C9532 0.1 25V F:1608
R9509 68k 1/10W :CHIP
R9515 1k 1/10W :CHIP
C9527 0.1 25V F:1608
IC9415 NJM4558V REGI SENSOR AMP
R9520 1k 1/10W :CHIP
R9502 4.7k 1/10W :CHIP
R9503 100k 1/10W :CHIP
C9531 0.1 25V F:1608
C9543 0.1 25V F:1608
D9409 UDZS-5.1B
C9542 0.1 25V F:1608
D9408 UDZS-5.1B
C9541 0.1 25V F:1608
D9407 UDZS-5.1B
C9540 0.1 25V F:1608
D9406 UDZS-5.1B
C9549 0.001 25V CH:1608
R9546 15k 1/16W :RN-CP
R9548 100k 1/16W :RN-CP
R9549 18k 1/16W :RN-CP
C9552 0.01 F:1608
C9546 0.1 25V F:1608
VEE
VCC
IC9420 NJM2068V DF FILTER
C9548 100p CH:1608
R9540 2.7k 1/16W :RN-CP
R9542 8.2k 1/16W :RN-CP
C9550 0.1 25V F:1608
C9547 390p CH:1608
R9539 3.9k 1/16W :RN-CP
R9541 3.3k 1/10W :CHIP
R9545 33k 1/10W :CHIP
FB9404 BLM11A601S :1608
C9408 22p CH:1608
DF_V
FB9403 BLM11A601S :1608
C9404 22p CH:1608
DF
D FOCUS
C9555 47 25V
R9550 22k 1/10W :CHIP
VTIM_AD
Q9411 2SC2412K SW
SEN_LE
-15V
SEN_U
+12V
SEN_LO
SEN_R
-15V
+12V
C9553 47 25V
C9554 47 25V
9-965-926-01<DA4x>AD P2

AD [DIGITAL REGI, PJED CPU, PJE DRIVE, REGI CORRECTION] [COMPONENT SIDE]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A
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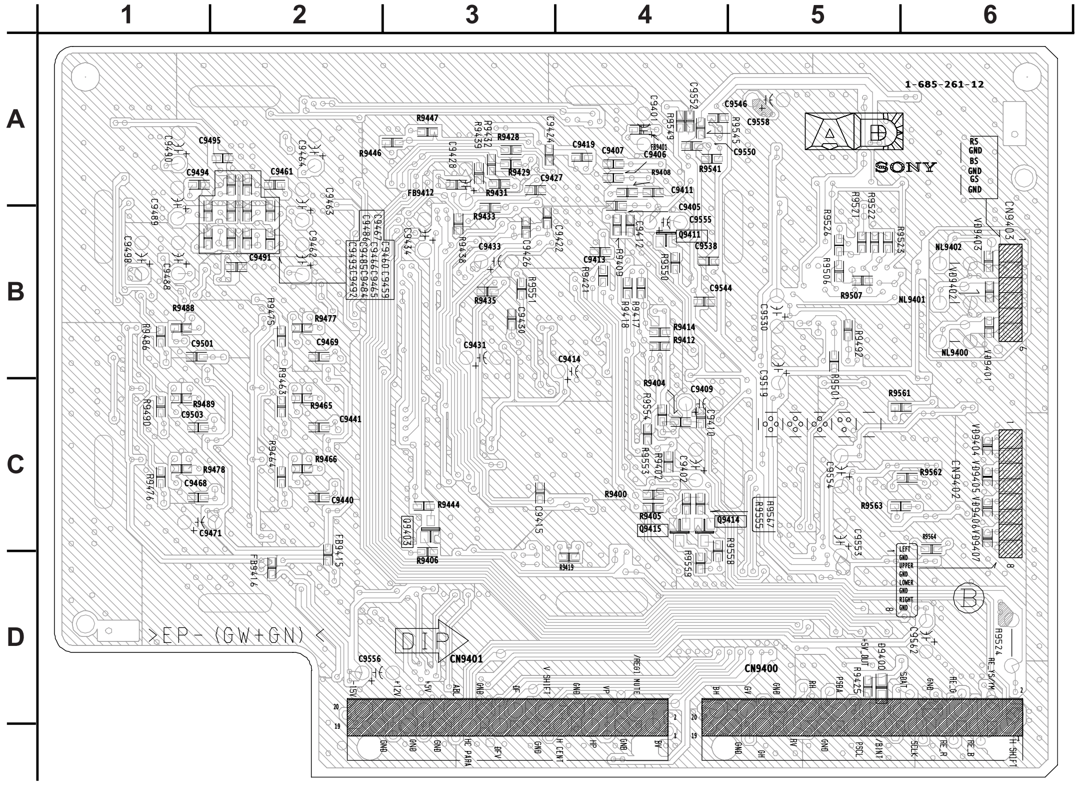
C
D
1-685-261-12
SONY
IC9417
IC9418
IC9422
IC9420
IC9401
IC9407
CN9403
IC9412
IC9419
IC9402
IC9403
IC9410
IC9409
IC9406
IC9411
IC9405
IC9408
IC9400
DIP
A-1300-411-A
CN9400
CN9401
R9403

[CONDUCTOR SIDE]


1
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A
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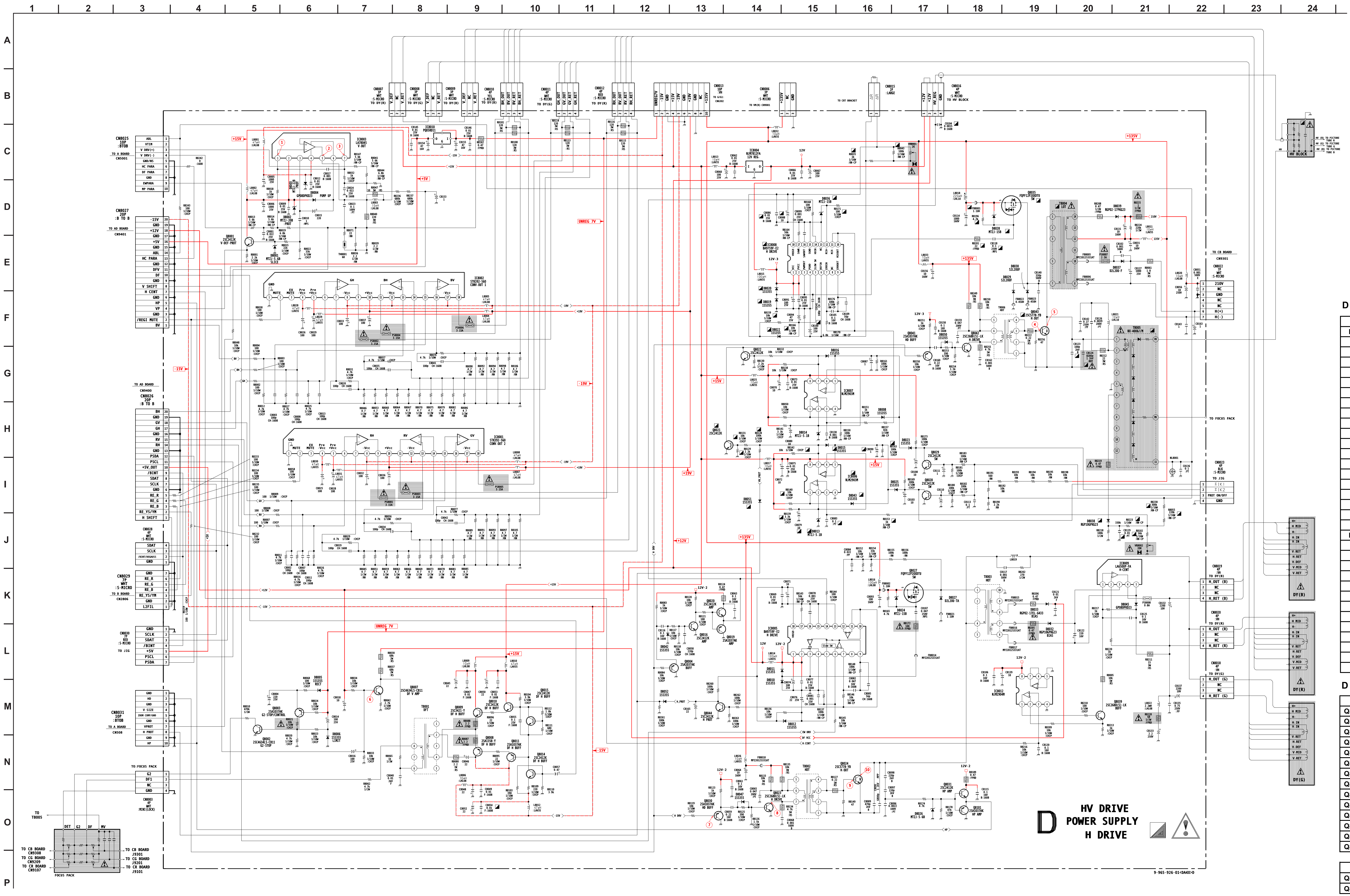
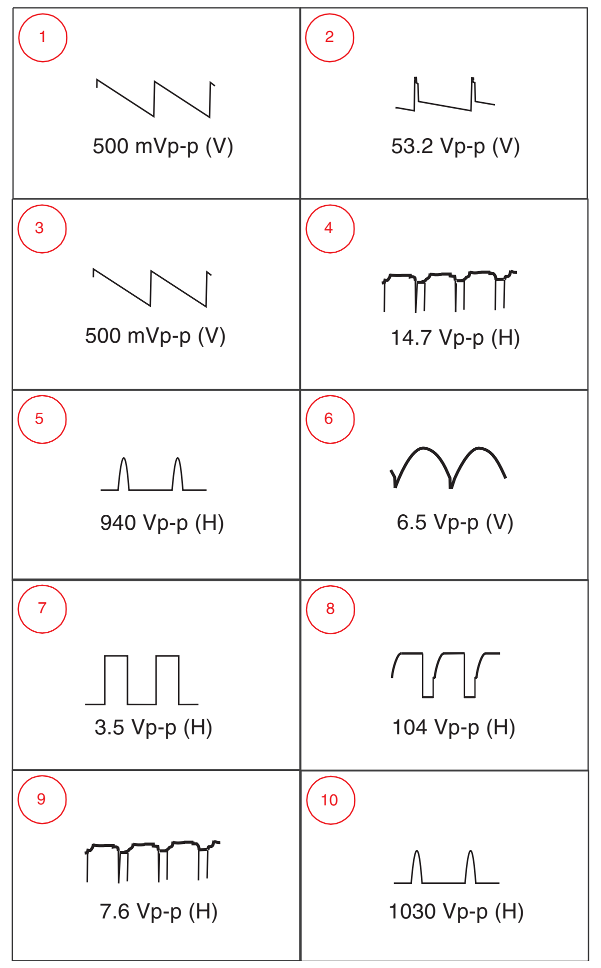
C
D
1-685-261-12
SONY
>EP-(GW+GN)<
DIP
CN9401
CN9400

D BOARD SCHEMATIC DIAGRAM


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
A B C D E F G H I J K L M N O P
D
HV DRIVE
POWER SUPPLY
H DRIVE
HV BLOCK
FOCUS PACK
TO FOCUS PACK
TO CB BOARD
TO AD BOARD
TO J1G
9-965-926-01<DA4X>D

D BOARD WAVEFORMS



D BOARD IC VOLTAGE LIST

IC8001		14	0.3	15	GND	10	7.4
PIN	**VOLT**	15	0	16	3.2	11	7.4
1	GND	16	0	17	2.6	12	7.4
2	4.3	17	-22	18	9.1	13	GND
3	N/C	18	0.1	**IC8006**		14	7.1
4	-22.0	**IC8003**		**PIN**	**VOLT**	15	GND
5	22.0	**PIN**	**VOLT**	1	0.1	16	3.2
6	-0.3	1	1.3	2	5.0	17	2.6
7	-0.3	2	15.0	3	4.5	18	9.1
8	-22.0	3	-13.1	4	GND	**IC8009**	
9	-0.5	4	-15.0	5	0.0	**PIN**	**VOLT**
10	22.0	5	0.4	6	5.0	1	98.2
11	0.1	6	15.0	7	0.1	2	98.2
12	-22.0	7	1.3	8	15.0	3	94.0
13	0.0	**IC8004**		**IC8007**		4	97.8
14	0.0	**PIN**	**VOLT**	**PIN**	**VOLT**	5	101.1
15	0.0	I	15.0	1	0.1	**IC8010**	
16	0.0	O	12.0	2	5.0	**PIN**	**VOLT**
17	-22.0	G	GND	3	4.0	I	7.0
18	0.1	**IC8005**		4	GND	O	5.0
IC8002		**PIN**	**VOLT**	5	0.0	G	GND
PIN	**VOLT**	1	12.0	6	5.0	**IC8012**	
1	GND	2	12.0	7	0.1	**PIN**	**VOLT**
2	4.3	3	5.8	8	15.0	1	2.7
3	N/C	4	GND	**IC8008**		2	2.1
4	-22.0	5	7.9	**PIN**	**VOLT**	3	2.1
5	22.0	6	3.8	1	12.0	4	GND
6	-0.1	7	3.8	2	12.0	5	GND
7	-0.1	8	N/C	3	6.0	6	0.0
8	-22.0	9	3.8	4	GND	7	0.0
9	0.0	10	3.6	5	8.0	8	12.0
10	22.0	11	3.6	6	7.4		
11	0.5	12	3.6	7	7.4		
12	-22.0	13	GND	8	N/C		
13	0.3	14	7.1	9	3.3		

All voltages are in V.

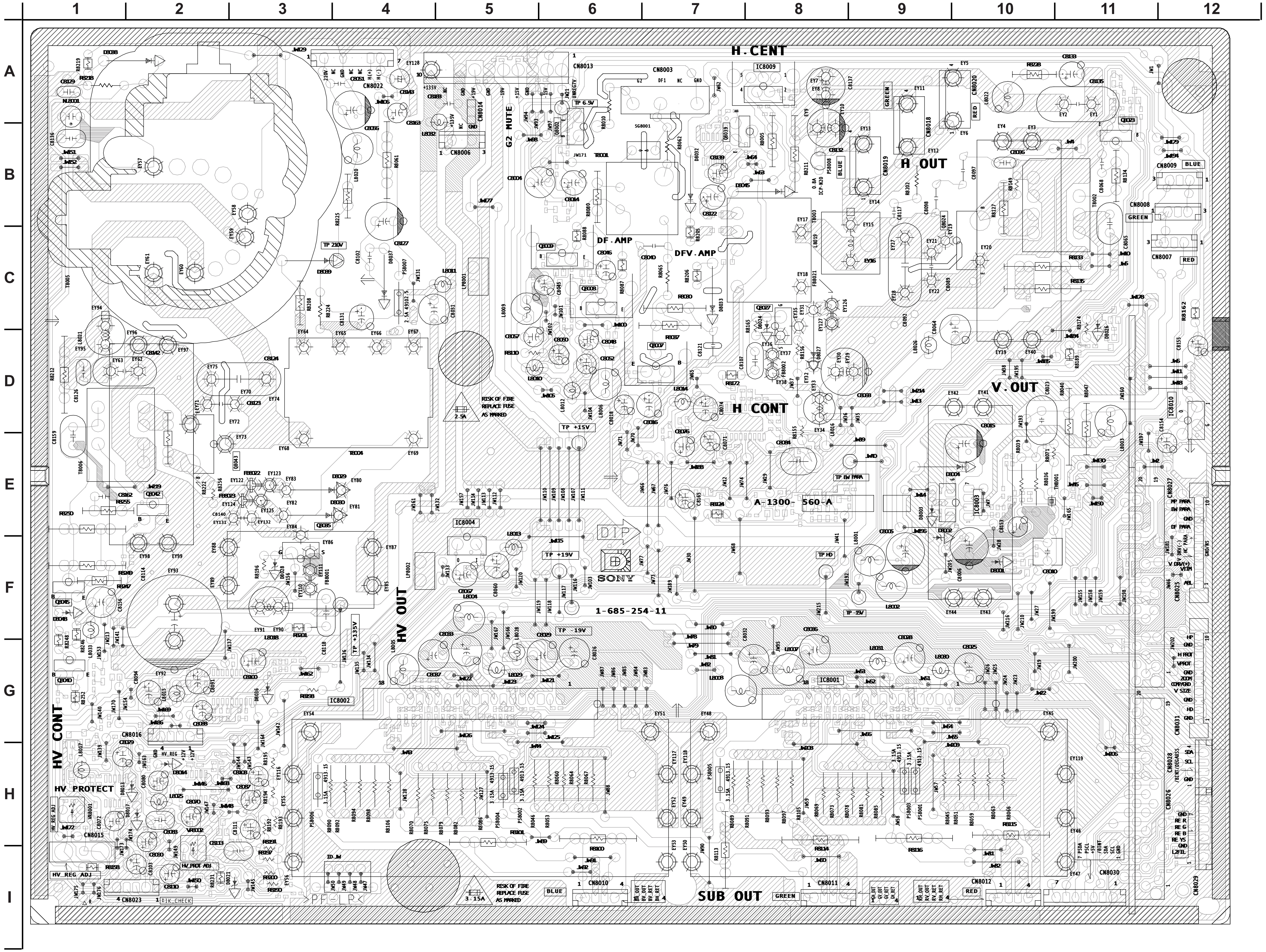
D BOARD TRANSISTOR VOLTAGE LIST

	B	C	E		B	C	E
Q8001	-0.4	15.0	0.1	**Q8021**	0.0	8.9	GND
Q8002	0	13.0	GND	**Q8022**	0.0	8.9	GND
Q8003	14.6	0.0	14.6	**Q8023**	-0.5	68.0	GND
Q8004	3.4	GND	4.0	**Q8024**	0.1	242.0	GND
Q8007	5.8	204.0	5.2	**Q8028**	0.5	0.0	GND
Q8008	2.8	-22.0	3.3	**Q8029**	0.5	0.0	GND
Q8009	4.0	22.0	3.4	**Q8030**	3.4	GND	4.0
Q8010	4.5	22.0	4.0	**Q8031**	0.2	12.0	0.6
Q8011	2.3	-22.0	2.7	**Q8039**	2.7	76.7	2.1
Q8014	-20.0	2.3	-20.6	**Q8041**	3.4	GND	8.9
Q8015	2.9	4.5	2.3	**Q8042**	9.6	29.8	GND
Q8016	-0.3	7.4	GND	**Q8043**	8.9	192.0	0.1
Q8019	7.4	GND	7.2	**Q8044**	0.6	0.0	GND
Q8020	7.4	12.0	7.2	**Q8101**	0.2	GND	0.6

	D	G	S
Q8027	112.3	131.1	135.0
Q8035	115.6	130.9	135.9

All voltages are in V.

D [HV DRIVE, POWER SUPPLY, H DRIVE] [COMPONENT SIDE]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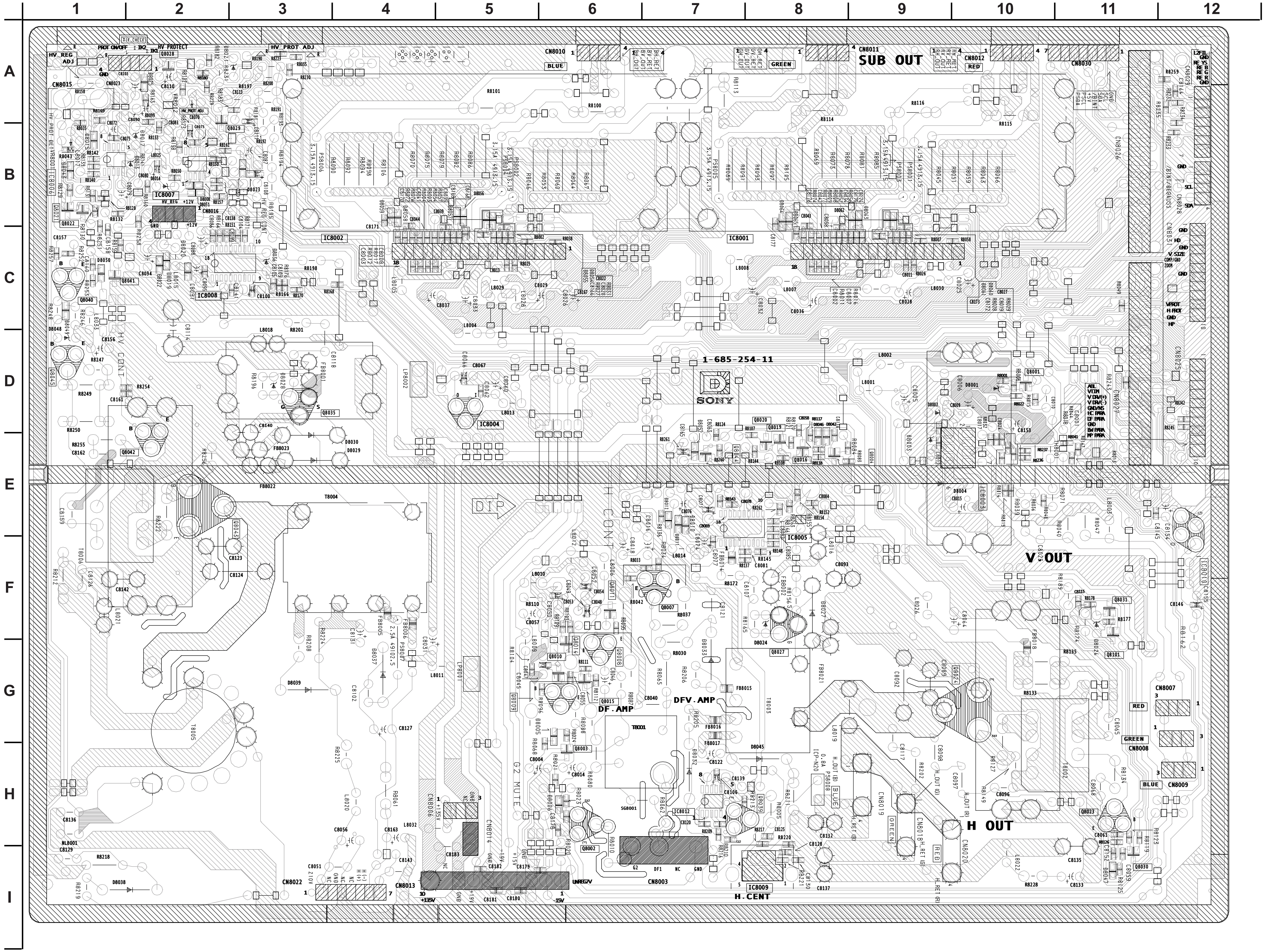
H.CENT
G2 MUTE
H OUT
DF.AMP
DFV.AMP
V.OUT
H CONT
A-1300-560-A
HV OUT
DIP
SONY
1-685-254-11
HV CONT
HV PROTECT
SUB OUT
RISK OF FIRE
REPLACE FUSE
AS MARKED
2.5A
3.15A
TP 230V
TP +15V
TP +19V
TP -19V
TP +135V
TP 6.9V
TP HD
TP EW PARA
IC8001
IC8002
IC8004
IC8009
IC8010
CN8003
CN8006
CN8007
CN8008
CN8009
CN8010
CN8011
CN8012
CN8013
CN8014
CN8015
CN8016
CN8018
CN8019
CN8020
CN8022
CN8023
CN8025
CN8026
CN8027
CN8028
CN8029
CN8030
CN8031
BLUE
GREEN
RED
HV_REG ADJ
HV_PROT ADJ

D [HV DRIVE, POWER SUPPLY, H DRIVE] [CONDUCTOR SIDE]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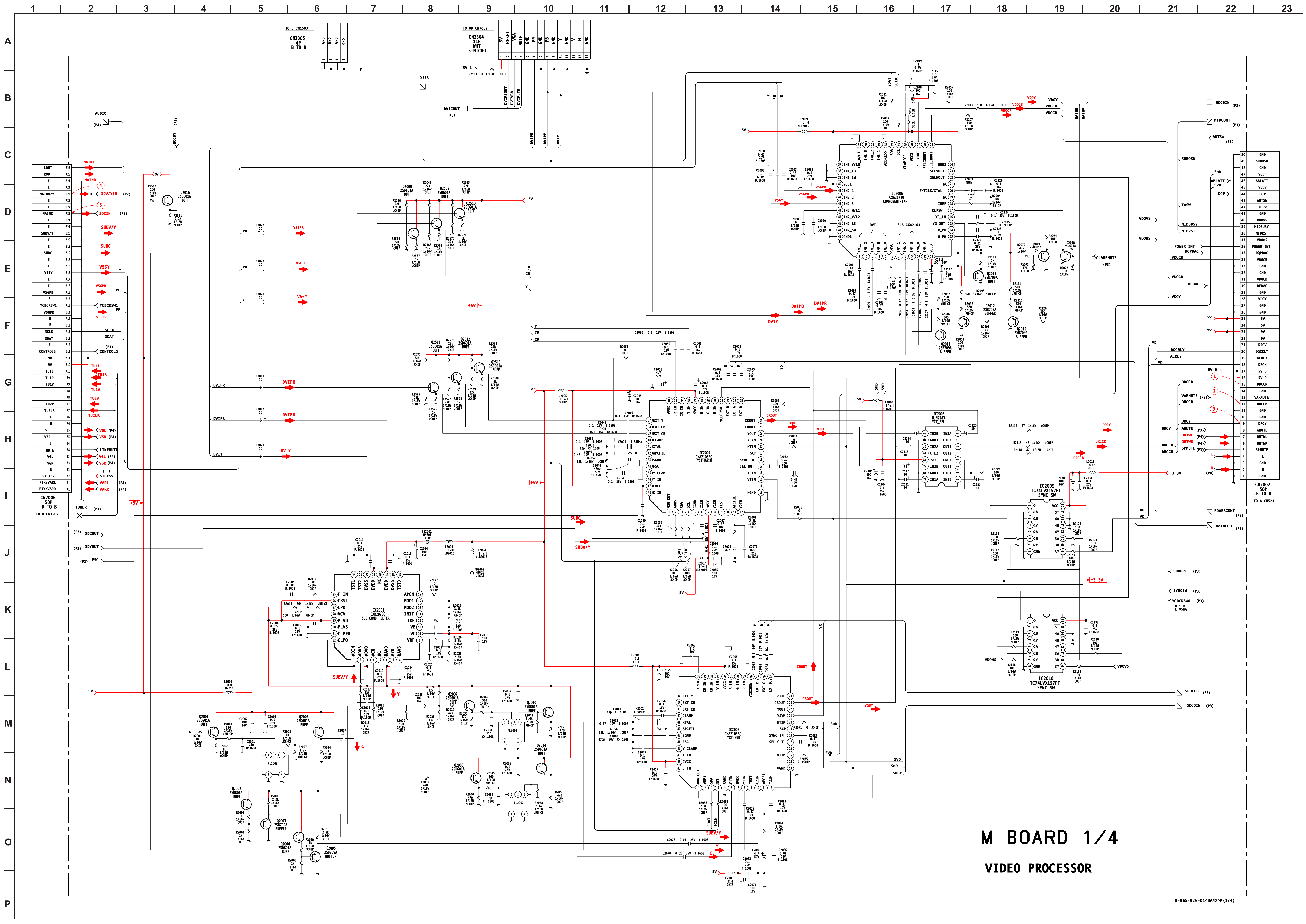
CN8010
BLUE
CN8011
SUB OUT
GREEN
CN8012
RED
CN8030
HV_REG ADJ
HV_PROTECT
HV_PROT_ADJ
CN8015
IC8007
IC8002
IC8001
IC8008
IC8004
1-685-254-11
SONY
DIP
H CONT
IC8005
V OUT
DF.AMP
DFV.AMP
G2 MUTE
CN8007
CN8008
CN8009
H OUT
CN8022
CN8013
CN8003
IC8009
H.CENT
UNREG7V
+135V
-15V

D BOARD LOCATOR LIST

IC		DIODE	
IC8001	C-7	D8001	D-10
IC8002	C-3	D8002	D-9
IC8003	E-10	D8003	D-9
IC8004	D-5	D8004	E-9
IC8005	F-8	D8005	H-5
IC8006	B-1	D8006	H-6
IC8007	B-2	D8008	B-2
IC8008	C-2	D8010	E-7
IC8009	I-8	D8011	E-7
IC8010	F-12	D8012	E-7
IC8012	H-7	D8013	B-2
TRANSISTOR		D8014	B-2
Q8001	D-10	D8015	B-1
Q8002	H-6	D8016	B-3
Q8003	G-6	D8019	C-2
Q8004	E-9	D8020	C-2
Q8007	F-7	D8022	C-2
Q8008	G-6	D8023	B-3
Q8009	G-5	D8024	G-7
Q8010	G-6	D8025	A-2
Q8011	F-6	D8026	G-11
Q8014	G-6	D8027	F-8
Q8015	G-6	D8028	D-3
Q8016	E-8	D8029	E-3
Q8019	D-8	D8030	E-3
Q8020	D-8	D8032	H-7
Q8021	B-1	D8033	G-7
Q8022	B-1	D8036	C-3
Q8023	H-11	D8037	G-4
Q8024	G-10	D8038	I-2
Q8027	F-8	D8039	G-3
Q8028	A-2	D8042	D-8
Q8029	B-3	D8043	B-1
Q8030	I-11	D8045	H-8
Q8031	F-11	D8047	I-11
Q8035	D-3	D8050	C-1
Q8039	H-8	D8051	B-2
Q8041	C-2	D8052	D-7
Q8042	E-2		
Q8043	E-3		
Q8044	E-8		
Q8101	G-11		

M BOARD SCHEMATIC DIAGRAM (1 OF 4)

The M board is not field repairable. If service is required, use the following part number to order a complete replacement board.
A-1300-646-A M Board, Complete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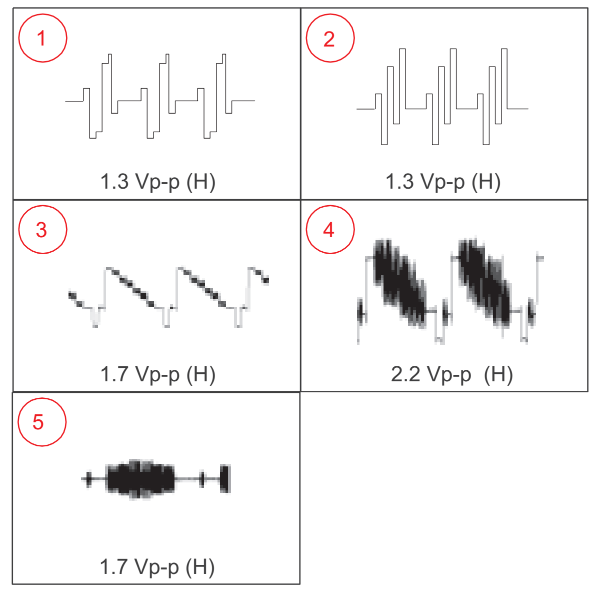
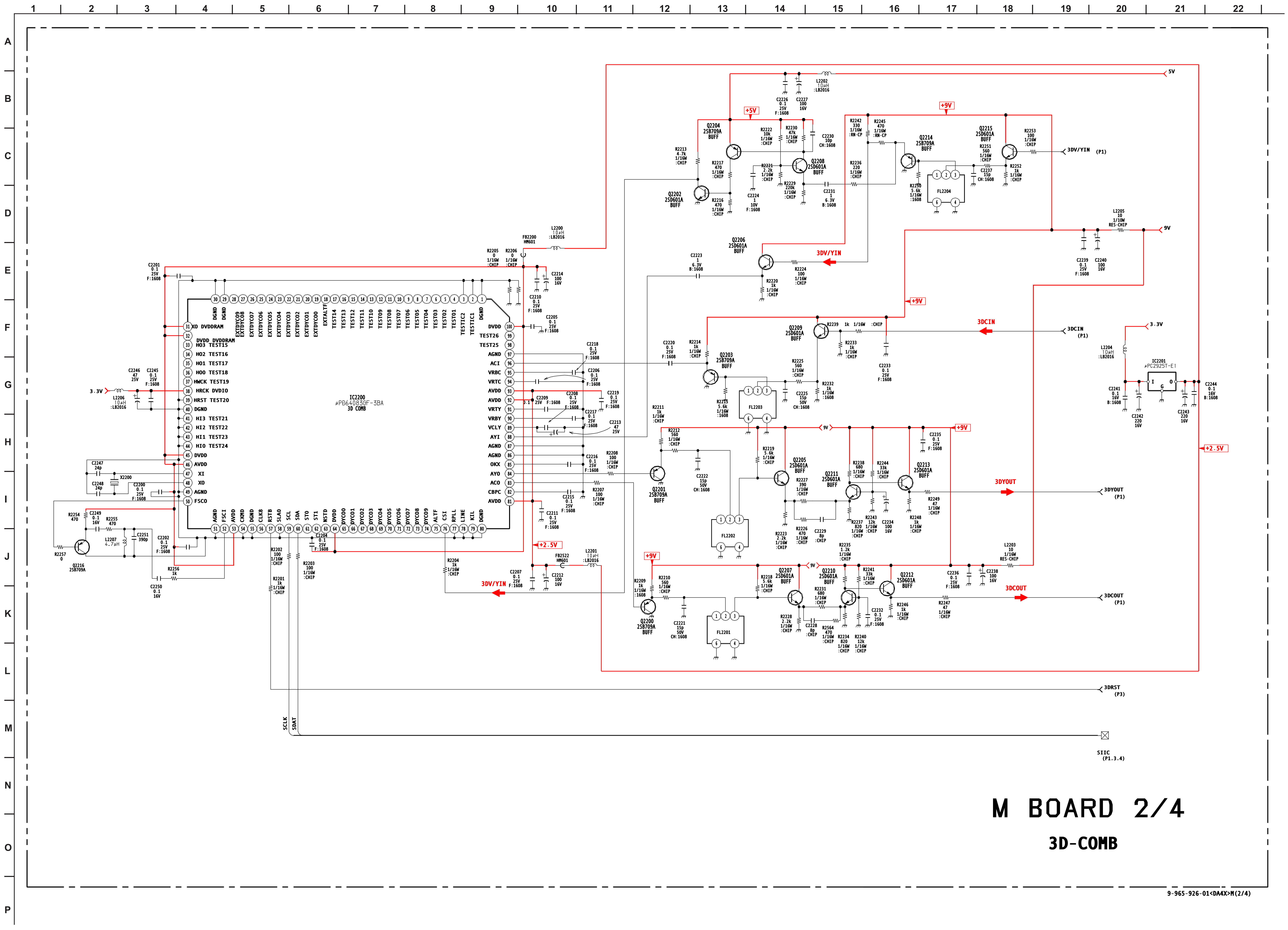
M
N
O
P
CN2006
50P
:B TO B
TO U CN1502
CN2305
4P
:B TO B
TO U CN1503
CN2304
11P
WHT
:S-MICRO
TO UD CN7002
CN2002
50P
:B TO B
TO A CN523
IC2006
CXA2172Q
COMPONENT-I/F
IC2004
CXA2103AQ
YCT-MAIN
IC2005
CXA2103AQ
YCT-SUB
IC2001
CXD2073Q
SUB COMB FILTER
IC2008
NJM2283
YCT SEL
IC2009
TC74LVX157FT
SYNC SW
IC2010
TC74LVX157FT
SYNC SW
AUDIO
TUNER
MAINL
MAINR
SUBV/Y
SUBC
V5GY
V5GPB
V5GPR
DVIPR
DVIPB
DVIY
CROUT
CBOUT
YOUT
DRCCR
DRCCB
DRCCY
MCCDIN
MIDCONT
POWERCONT
MAINCCO
SUBCCO
SCCDIN
M BOARD 1/4
VIDEO PROCESSOR
9-965-926-01<DA4X>M(1/4)

M BOARD WAVEFORMS



M BOARD SCHEMATIC DIAGRAM (2 OF 4)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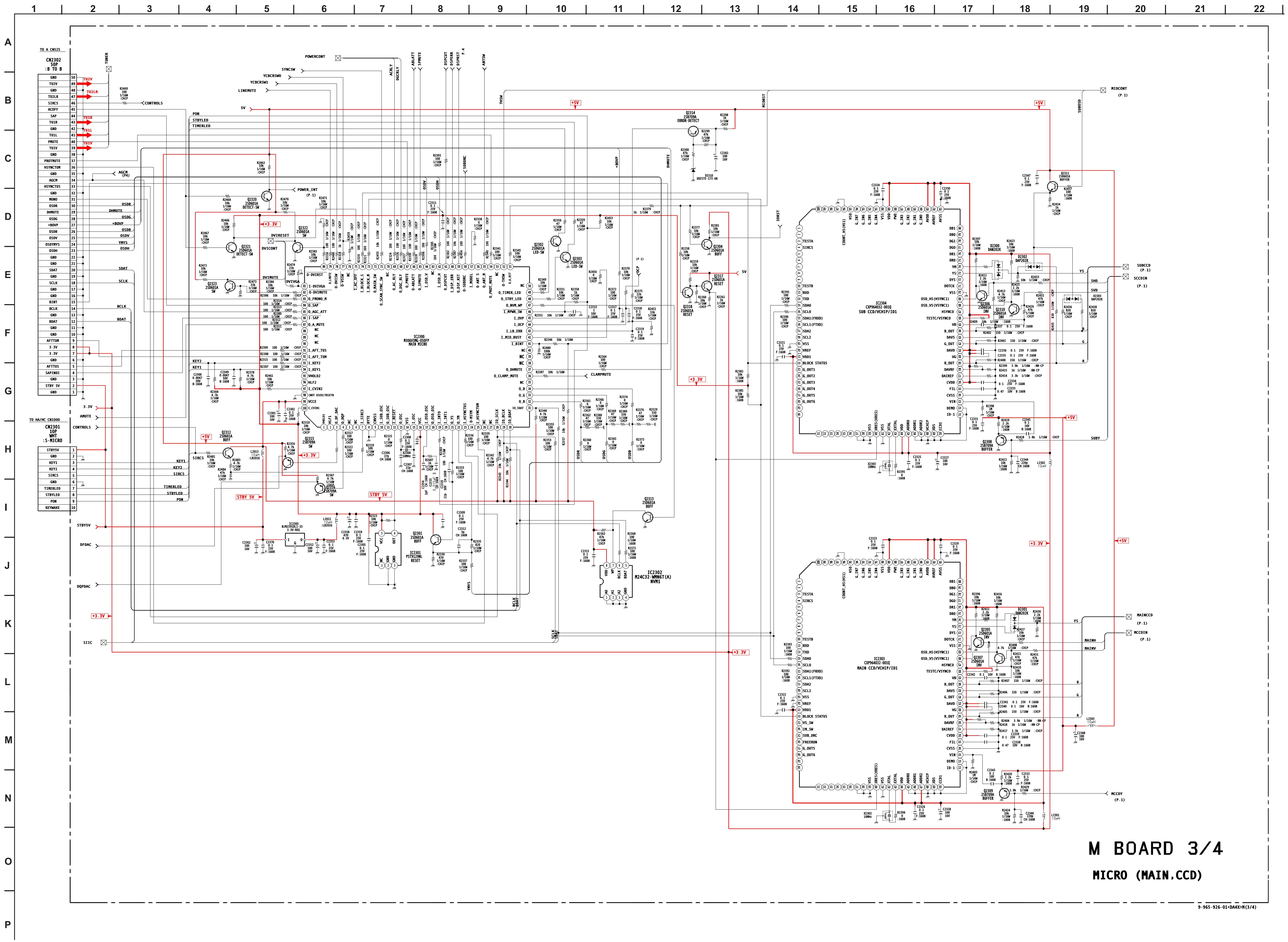
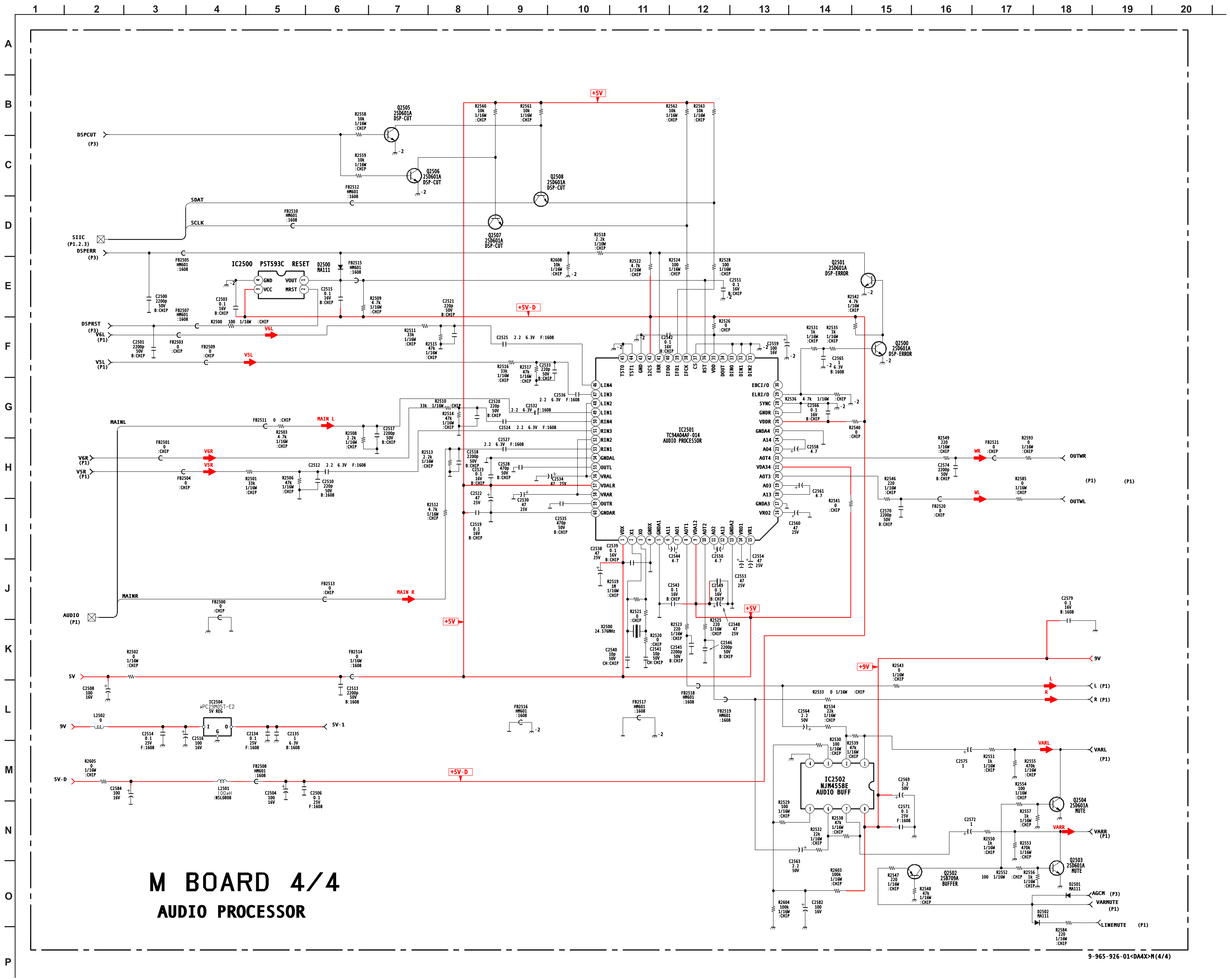
H
I
J
K
L
M
N
O
P
5V
9V
+5V
+9V
3.3V
+2.5V
3DV/YIN (P1)
3DCIN (P1)
3DYOUT (P1)
3DCOUT (P1)
3DRST (P3)
SIIC (P1.3.4)
3DV/YIN
3DCIN
3DYOUT
3DCOUT
IC2200 μPD64083GF-3BA 3D COMB
IC2201 μPC2925T-E1
Q2200 2SB709A BUFF
Q2201 2SB709A BUFF
Q2202 2SD601A BUFF
Q2203 2SB709A BUFF
Q2204 2SB709A BUFF
Q2205 2SD601A BUFF
Q2206 2SD601A BUFF
Q2207 2SD601A BUFF
Q2208 2SD601A BUFF
Q2209 2SD601A BUFF
Q2210 2SD601A BUFF
Q2211 2SD601A BUFF
Q2212 2SD601A BUFF
Q2213 2SD601A BUFF
Q2214 2SB709A BUFF
Q2215 2SD601A BUFF
Q2216 2SB709A
FL2201
FL2202
FL2203
FL2204
X2200
SCLK
SDAT
M BOARD 2/4
3D-COMB
9-965-926-01<DA4X>M(2/4)

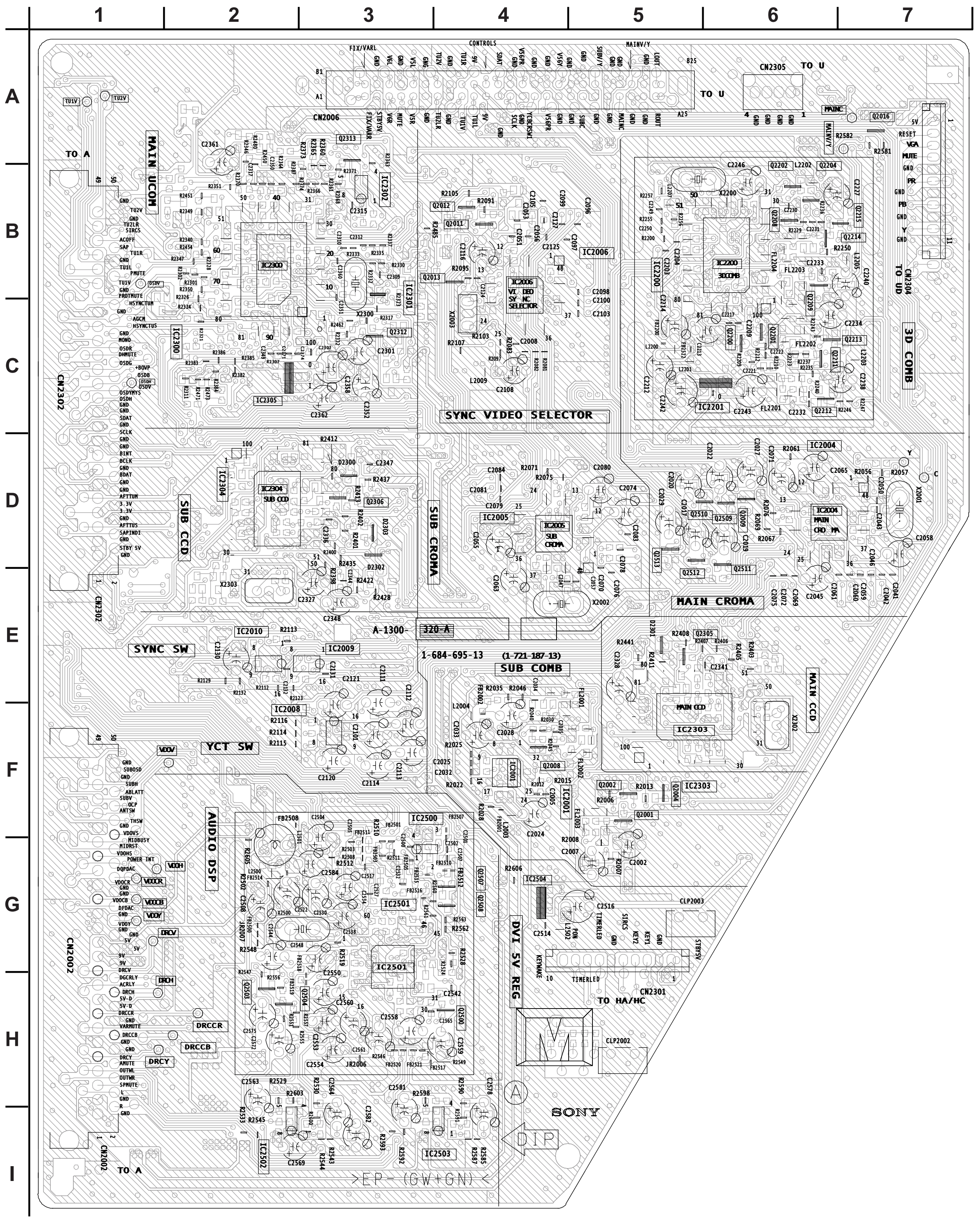
M BOARD SCHEMATIC DIAGRAM (3 OF 4)


CN2302
50P
:B TO B
CN2301
10P
WHT
:S-MICRO
IC2300
M306V0ME-050FP
MAIN MICRO
IC2304
CXP964032-001Q
SUB CCD/VCHIP/ID1
IC2303
CXP964032-001Q
MAIN CCD/VCHIP/ID1
IC2302
M24C32-WMN6T(A)
NVM1
IC2301
PST9129NL
RESET
M BOARD 3/4
MICRO (MAIN.CCD)
9-965-926-01<DA4X>M(3/4)

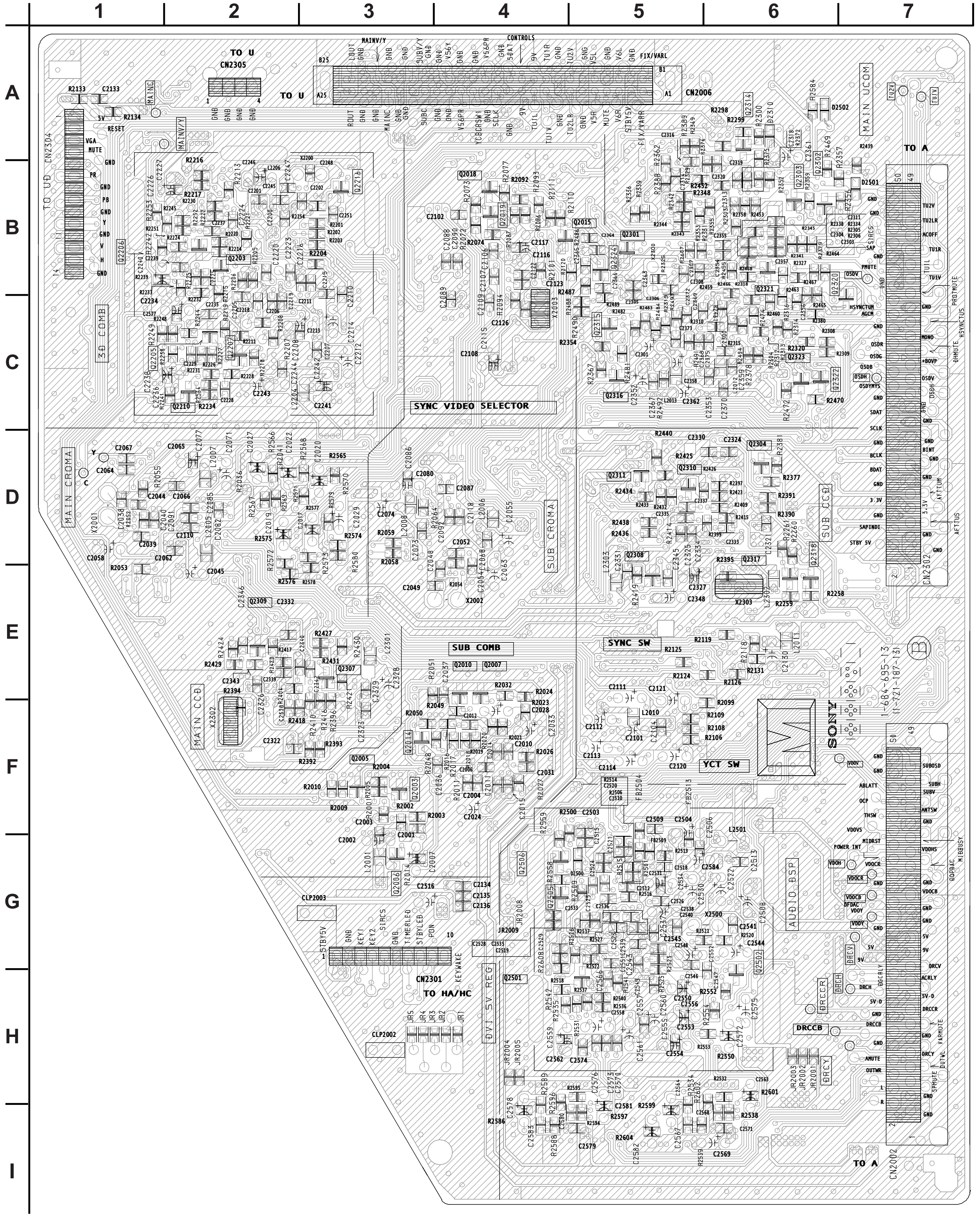
M BOARD SCHEMATIC DIAGRAM (4 OF 4)


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
M BOARD 4/4
AUDIO PROCESSOR
IC2501
TC9AOAAF-014
AUDIO PROCESSOR
IC2500 PST593C RESET
IC2502
NJM4558E
AUDIO BUFF
IC2504
μPC29M05T-E2
5V REG
Q2505 2SD601A DSP-CUT
Q2506 2SD601A DSP-CUT
Q2507 2SD601A DSP-CUT
Q2508 2SD601A DSP-CUT
Q2501 2SD601A DSP-ERROR
Q2500 2SD601A DSP-ERROR
Q2502 2SB709A BUFFER
Q2503 2SD601A MUTE
Q2504 2SD601A MUTE
D2500 MA111
D2501 MA111
D2502 MA111
X2500 24.576MHz
L2501 100μH
L2502 0
DSPCUT (P3)
SIIC (P1,2,3)
DSPERR (P3)
DSPRST (P3)
VGL (P1)
VSL (P1)
MAINL
VGR (P1)
VSR (P1)
MAINR
AUDIO (P1)
SDAT
SCLK
5V
9V
5V-D
5V-1
+5V
+5V-D
+9V
OUTWR
OUTWL
9V
L (P1)
R (P1)
VARL (P1)
VARR (P1)
AGCM (P3)
VARMUTE (P1)
LINEMUTE (P1)
MAIN L
MAIN R
VGR
VSR
VGL
VSL
WR
WL
L
R
VARL
VARR
9-965-926-01<DA4X>M(4/4)

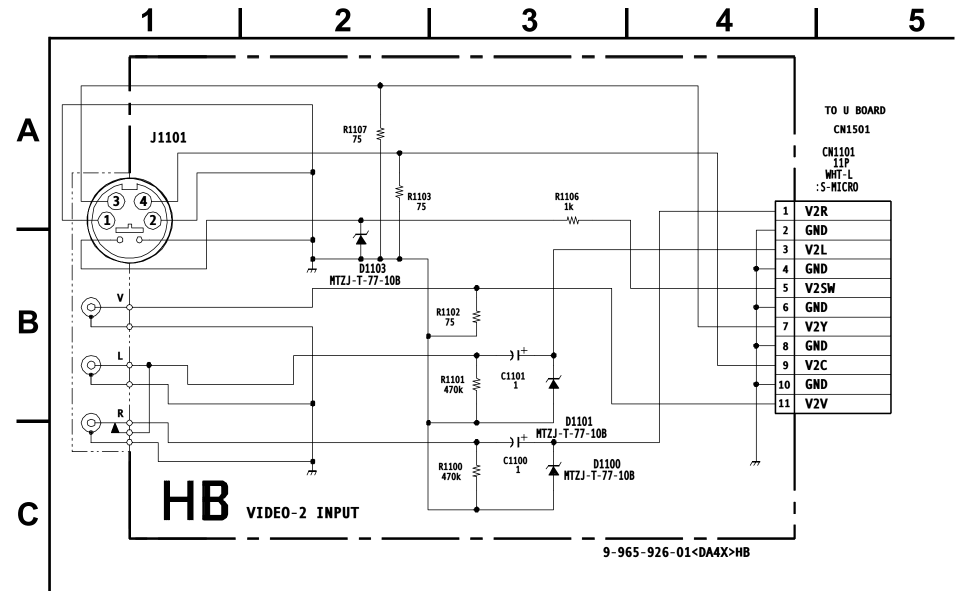
M [VIDEO PROCESSOR, 3-D COMB, MICRO (MAIN, CCD), AUDIO PROCESSOR] [COMPONENT SIDE]


1
2
3
4
5
6
7
A
B
C
D
E
F
G
H
I
CN2006
CN2305
TO U
TO A
MAIN UCOM
IC2300
IC2302
SYNC VIDEO SELECTOR
3D COMB
IC2200
IC2201
CN2304
TO UD
CN2302
SUB CCD
IC2304
SUB CROMA
IC2005
MAIN CROMA
IC2004
SYNC SW
IC2010
IC2009
IC2008
A-1300-
320-A
1-684-695-13
(1-721-187-13)
SUB COMB
MAIN CCD
IC2303
YCT SW
AUDIO DSP
IC2500
IC2501
IC2502
IC2503
DVI 5V REG
CN2301
TO HA/HC
CN2002
CLP2003
CLP2002
DRCCR
DRCCB
DRCY
SONY
DIP
>EP-(GW+GN)<

[CONDUCTOR SIDE]


1
2
3
4
5
6
7
A
B
C
D
E
F
G
H
I
TO U
CN2305
CN2006
TO UD CN2304
MAIN UCOM
3D COMB
SYNC VIDEO SELECTOR
MAIN CROMA
SUB CROMA
SUB CCD
MAIN CCD
SUB COMB
SYNC SW
YCT SW
1-684-695-13
(1-721-187-13)
SONY
CN2301
TO HA/HC
DVI 5V REG
AUDIO DSP
CLP2003
CLP2002
DRCCR
DRCCB
DRCY
TO A
CN2002

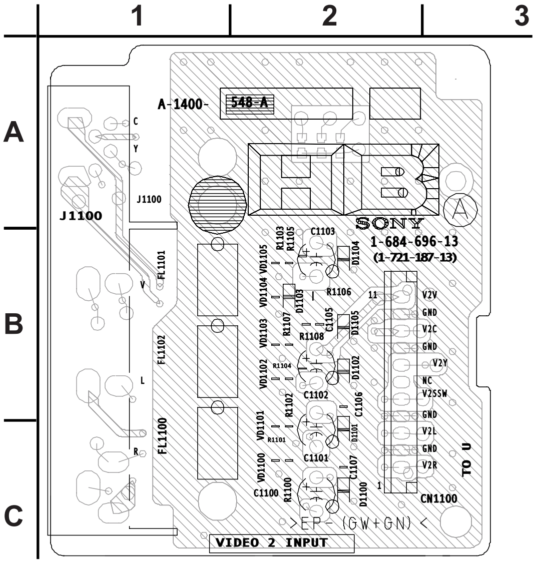
HB BOARD SCHEMATIC DIAGRAM

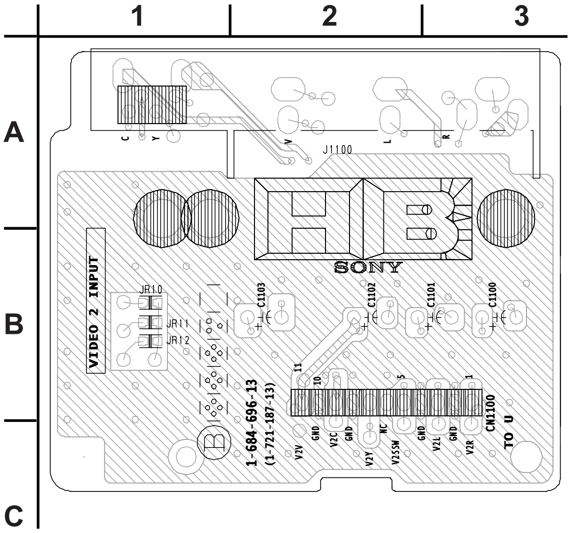

1
2
3
4
5
A
B
C
J1101
R1107
75
R1103
75
R1106
1k
D1103
MTZJ-T-77-10B
R1102
75
R1101
470k
C1101
1
D1101
MTZJ-T-77-10B
R1100
470k
C1100
1
D1100
MTZJ-T-77-10B
V
L
R
TO U BOARD
CN1501
CN1101
11P
WHT-L
:S-MICRO
1 V2R
2 GND
3 V2L
4 GND
5 V2SW
6 GND
7 V2Y
8 GND
9 V2C
10 GND
11 V2V
HB VIDEO-2 INPUT
9-965-926-01<DA4X>HB

HB [VIDEO-2 INPUT]

COMPONENT SIDE

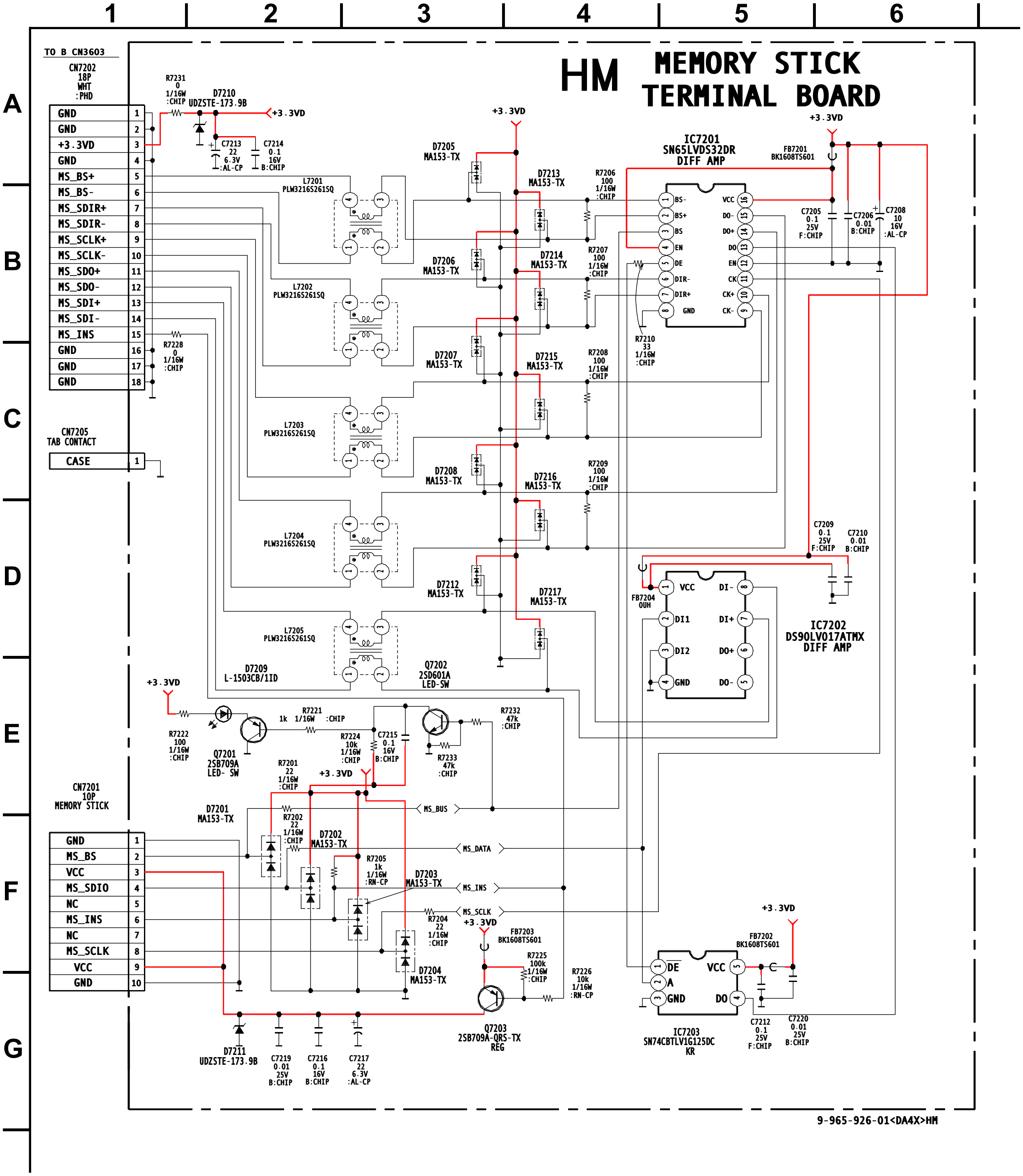
CONDUCTOR SIDE


1
2
3
A
B
C
A-1400-
548-A
J1100
FL1101
FL1102
FL1100
SONY
1-684-696-13
(1-721-187-13)
C1103
R1106
C1102
C1101
C1100
V2V
GND
V2C
GND
V2Y
NC
V2SSW
GND
V2L
GND
V2R
TO U
CN1100
>EP-(GW+GN)<
VIDEO 2 INPUT


1
2
3
A
B
C
J1100
SONY
VIDEO 2 INPUT
JR10
JR11
JR12
C1103
C1102
C1101
C1100
1-684-696-13
(1-721-187-13)
V2V
GND
V2C
GND
V2Y
NC
V2SSW
GND
V2L
GND
V2R
CN1100
TO U

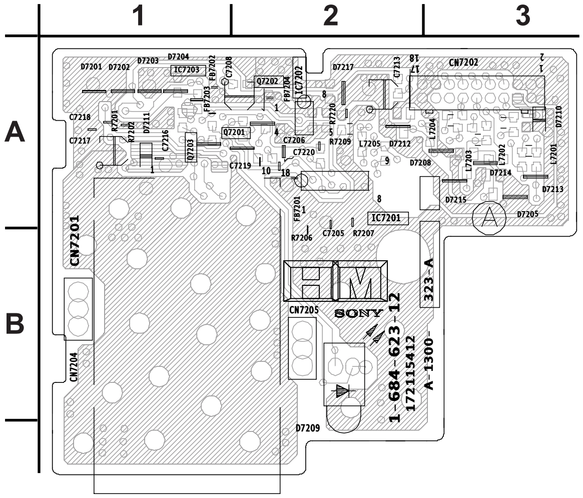
HM BOARD SCHEMATIC DIAGRAM

The HM board is not field repairable. If service is required, use the following part number to order a complete replacement board. A-1300-323-A HM Board, Complete

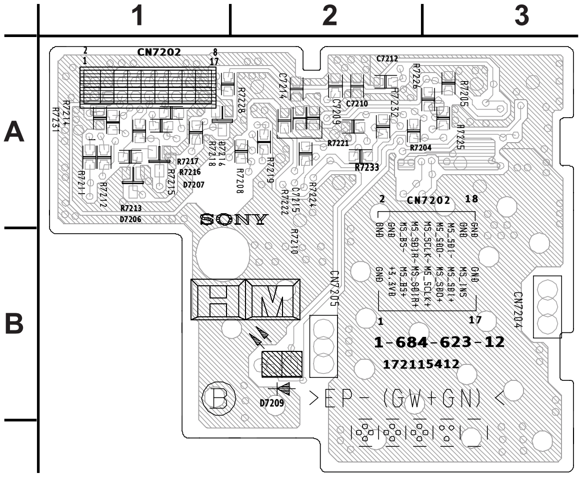

1
2
3
4
5
6
A
B
C
D
E
F
G
HM
MEMORY STICK
TERMINAL BOARD
TO B CN3603
CN7202
18P
WHT
:PHD
GND
GND
+3.3VD
GND
MS_BS+
MS_BS-
MS_SDIR+
MS_SDIR-
MS_SCLK+
MS_SCLK-
MS_SDO+
MS_SDO-
MS_SDI+
MS_SDI-
MS_INS
GND
GND
GND
R7231
0
1/16W
:CHIP
D7210
UDZSTE-173.9B
+3.3VD
C7213
22
6.3V
:AL-CP
C7214
0.1
16V
B:CHIP
L7201
PLW3216S261SQ
L7202
PLW3216S261SQ
L7203
PLW3216S261SQ
L7204
PLW3216S261SQ
L7205
PLW3216S261SQ
R7228
0
1/16W
:CHIP
CN7205
TAB CONTACT
CASE
D7205
MA153-TX
D7206
MA153-TX
D7207
MA153-TX
D7208
MA153-TX
D7212
MA153-TX
D7213
MA153-TX
D7214
MA153-TX
D7215
MA153-TX
D7216
MA153-TX
D7217
MA153-TX
R7206
100
1/16W
:CHIP
R7207
100
1/16W
:CHIP
R7208
100
1/16W
:CHIP
R7209
100
1/16W
:CHIP
R7210
33
1/16W
:CHIP
IC7201
SN65LVDS32DR
DIFF AMP
BS-
BS+
BS
EN
DE
DIR-
DIR+
GND
VCC
DO-
DO+
DO
EN
CK
CK+
CK-
FB7201
BK1608TS601
C7205
0.1
25V
F:CHIP
C7206
0.01
B:CHIP
C7208
10
16V
:AL-CP
C7209
0.1
25V
F:CHIP
C7210
0.01
B:CHIP
FB7204
0UH
IC7202
DS90LV017ATMX
DIFF AMP
VCC
DI1
DI2
GND
DI-
DI+
DO+
DO-
D7209
L-1503CB/1ID
Q7202
2SD601A
LED-SW
R7222
100
1/16W
:CHIP
Q7201
2SB709A
LED- SW
R7221
1k 1/16W :CHIP
R7224
10k
1/16W
:CHIP
C7215
0.1
16V
B:CHIP
R7232
47k
:CHIP
R7233
47k
:CHIP
R7201
22
1/16W
:CHIP
CN7201
10P
MEMORY STICK
GND
MS_BS
VCC
MS_SDIO
NC
MS_INS
NC
MS_SCLK
VCC
GND
D7201
MA153-TX
R7202
22
1/16W
:CHIP
D7202
MA153-TX
R7205
1k
1/16W
:RN-CP
D7203
MA153-TX
MS_BUS
MS_DATA
MS_INS
MS_SCLK
R7204
22
1/16W
:CHIP
D7204
MA153-TX
FB7203
BK1608TS601
R7225
100k
1/16W
:CHIP
R7226
10k
1/16W
:RN-CP
Q7203
2SB709A-QRS-TX
REG
FB7202
BK1608TS601
IC7203
SN74CBTLV1G125DC
KR
DE
A
GND
VCC
DO
C7212
0.1
25V
F:CHIP
C7220
0.01
25V
B:CHIP
D7211
UDZSTE-173.9B
C7219
0.01
25V
B:CHIP
C7216
0.1
16V
B:CHIP
C7217
22
6.3V
:AL-CP
9-965-926-01<DA4X>HM

HM [MEMORY STICK, TERMINAL BOARD]

COMPONENT SIDE

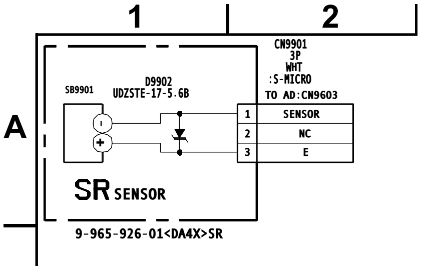

1
2
3
A
B
CN7201
CN7204
CN7202
CN7205
IC7201
IC7202
IC7203
Q7201
Q7202
Q7203
D7201
D7202
D7203
D7204
D7205
D7208
D7209
D7210
D7212
D7213
D7214
D7215
D7217
C7205
C7206
C7208
C7213
C7216
C7217
C7218
C7219
C7220
R7201
R7202
R7206
R7207
R7209
R7220
L7201
L7202
L7203
L7204
L7205
FB7201
FB7202
FB7203
FB7204
HM
SONY
1-684-623-12
172115412
A-1300-323-A

CONDUCTOR SIDE


1
2
3
A
B
CN7202
CN7204
CN7205
C7209
C7210
C7212
C7214
C7215
R7204
R7205
R7208
R7210
R7212
R7213
R7214
R7216
R7217
R7218
R7219
R7221
R7222
R7224
R7225
R7226
R7228
R7231
R7232
R7233
D7206
D7207
D7209
SONY
HM
GND
MS_INS
MS_SBI+
MS_SBI-
MS_SBO-
MS_SBO+
MS_SCLK+
MS_SCLK-
MS_SBIR+
MS_SBIR-
MS_BS+
MS_BS-
+3.3VB
1-684-623-12
172115412
>EP-(GW+GN)<

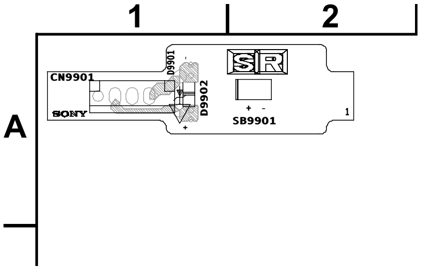
SR BOARD SCHEMATIC DIAGRAM

The SR board is not field repairable. If service is required, use the following part number to order a complete replacement board. A-1400-759-A SR Board, Complete

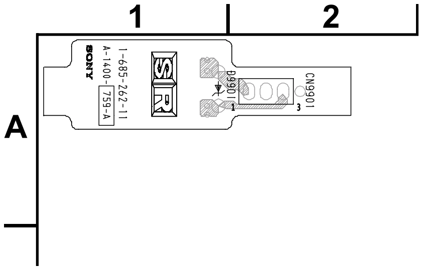

1
2
A
CN9901
3P
WHT
:S-MICRO
TO AD:CN9603
D9902
UDZSTE-17-5.6B
SB9901
1
SENSOR
2
NC
3
E
SR SENSOR
9-965-926-01<DA4X>SR

SR [SENSOR]

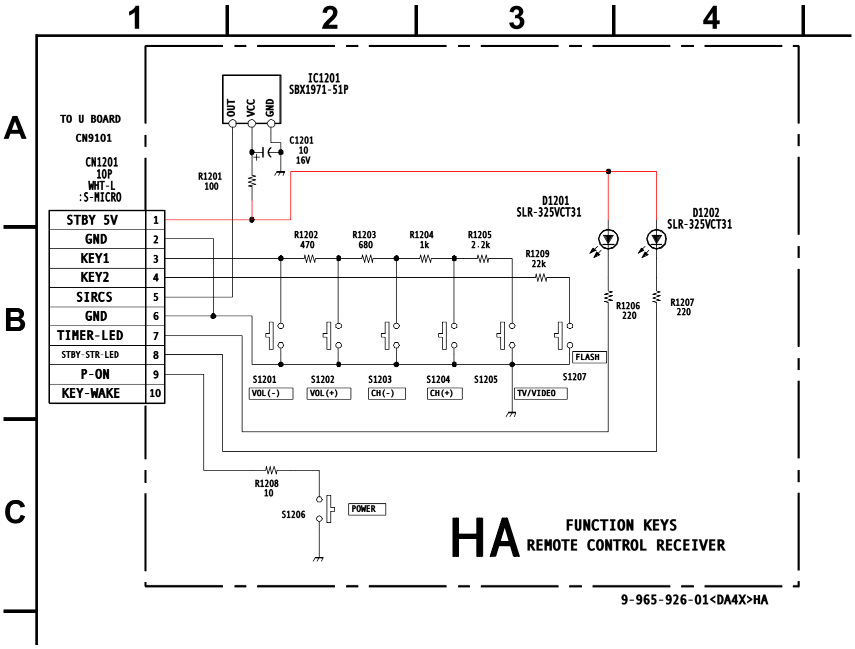
COMPONENT SIDE


1
2
A
CN9901
D9901
D9902
SR
SB9901
SONY
1

CONDUCTOR SIDE


1
2
A
SONY
A-1400-759-A
1-685-262-11
SR
D9901
CN9901
1
3

HA BOARD SCHEMATIC DIAGRAM


1
2
3
4
A
B
C
TO U BOARD
CN9101
CN1201
10P
WHT-L
:S-MICRO
STBY 5V 1
GND 2
KEY1 3
KEY2 4
SIRCS 5
GND 6
TIMER-LED 7
STBY-STR-LED 8
P-ON 9
KEY-WAKE 10
IC1201
SBX1971-51P
OUT
VCC
GND
C1201
10
16V
R1201
100
D1201
SLR-325VCT31
D1202
SLR-325VCT31
R1202
470
R1203
680
R1204
1k
R1205
2.2k
R1209
22k
R1206
220
R1207
220
S1201
VOL(-)
S1202
VOL(+)
S1203
CH(-)
S1204
CH(+)
S1205
TV/VIDEO
S1207
FLASH
R1208
10
S1206
POWER
HA
FUNCTION KEYS
REMOTE CONTROL RECEIVER
9-965-926-01<DA4X>HA

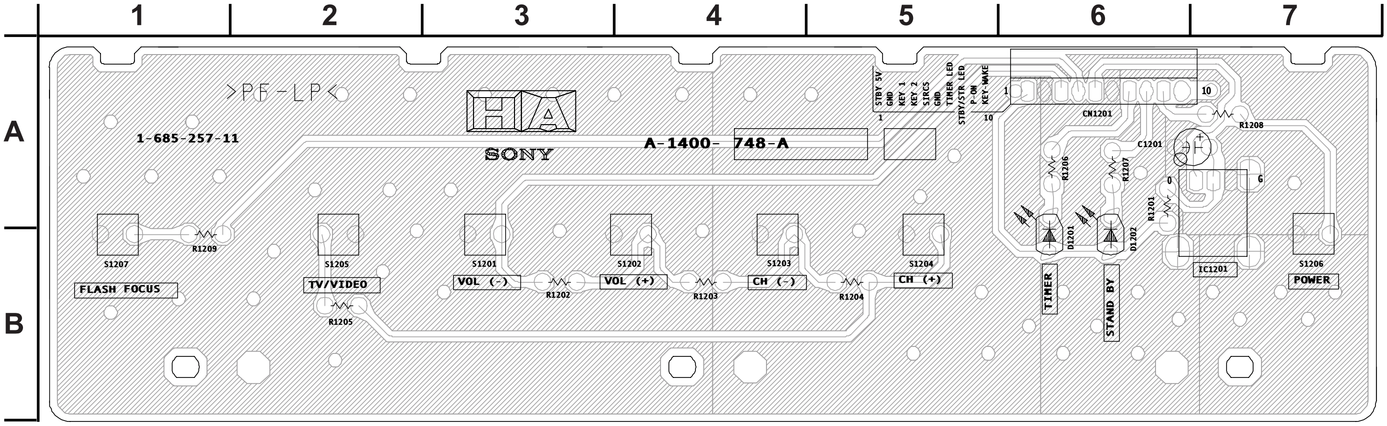
HA BOARD IC VOLTAGE TABLE

IC12001	
PIN	VOLT
1	5.0
2	5.0
3	GND

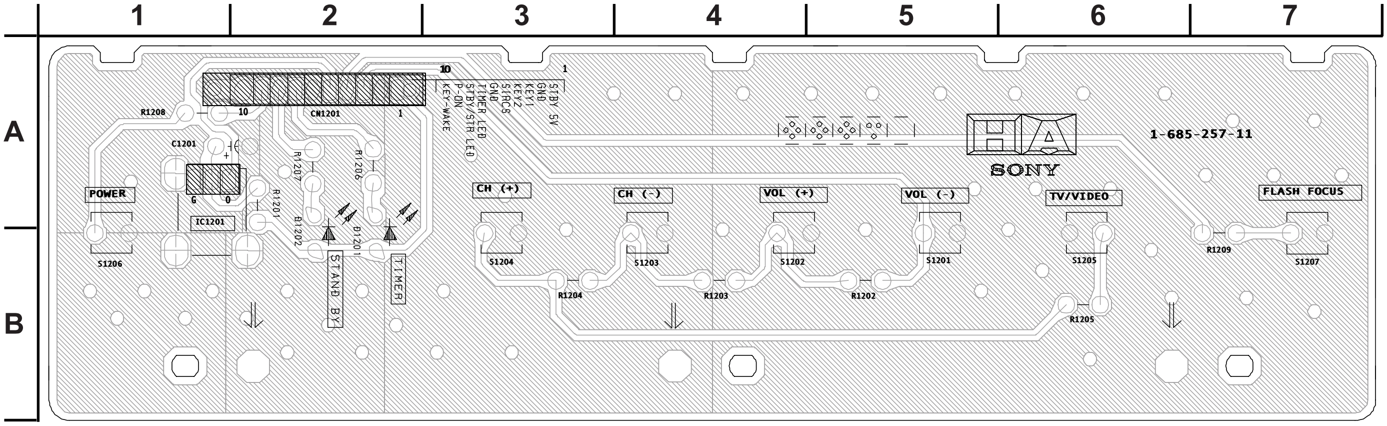
All voltages are in V.

HA [FUNCTION KEYS, REMOTE CONTROL RECEIVER]

COMPONENT SIDE

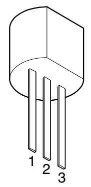

1
2
3
4
5
6
7
A
B
>PF-LP<
1-685-257-11
HA
SONY
A-1400-748-A
STBY 5V
GND
KEY 1
KEY 2
SIRCS
GND
TIMER LED
STBY/STR LED
P-ON
KEY-WAKE
1
10
CN1201
R1208
C1201
R1206
R1207
R1201
IC1201
D1201
D1202
TIMER
STAND BY
S1207
R1209
FLASH FOCUS
S1205
TV/VIDEO
R1205
S1201
VOL (-)
R1202
S1202
VOL (+)
R1203
S1203
CH (-)
R1204
S1204
CH (+)
S1206
POWER

CONDUCTOR SIDE

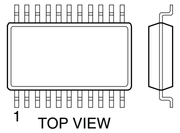

1
2
3
4
5
6
7
A
B
R1208
10
CN1201
1
STBY 5V
GND
KEY 1
KEY 2
SIRCS
GND
TIMER LED
STBY/STR LED
P-ON
KEY-WAKE
C1201
POWER
IC1201
S1206
R1207
R1206
R1201
B1202
B1201
STAND BY
TIMER
CH (+)
S1204
R1204
CH (-)
S1203
R1203
VOL (+)
S1202
R1202
VOL (-)
S1201
TV/VIDEO
S1205
R1205
HA
SONY
1-685-257-11
FLASH FOCUS
R1209
S1207

5-5. SEMICONDUCTORS

AN77L12-TA
NJM78L12A-T3
NJM79L05A
NJM79L05A-T3

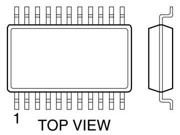


BA9759F-E2



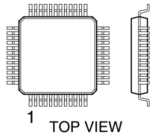
18pin SOP

CD0031AM



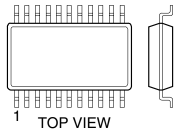
48pin SOP

CM0017AF



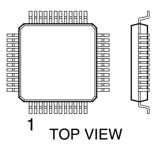
100pin QFP

CXA1726AM
CXA1726AM-T6



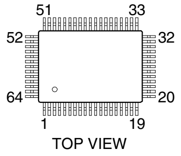
30pin SOP

CXA2103Q
CXA2151Q

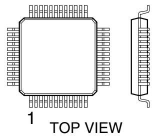


48pin QFP

CXA2069Q
CXA2150AQ

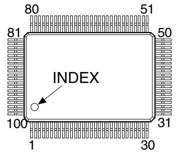

51
33
52
32
64
20
1
19
TOP VIEW

CXD2073Q-T4

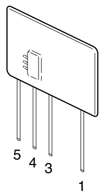


32pin QFP

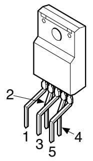
CXP961064-001Q
M306V2ME-154FP
µPD64082GF-3BA


80
51
81
50
INDEX
100
31
1
30

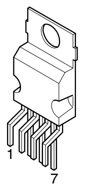
DM-58



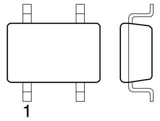
LA6500-FA
LA6500P-FA



LA78045
TDA2052

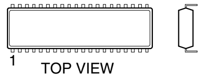


MAX4450EUK-TG069



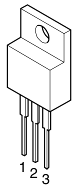
5pin CHIP

MCZ3001D

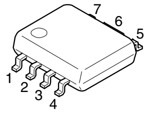


18pin DIP

MC7805CT
MC7812CT
NJM7805FA
NJM7812FA
PQ09RF21
TA7805S
TA7812S



MM1476AF(TP)



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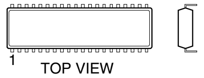
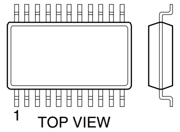
µPD424210LE-60-E2



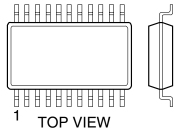
40pin DIP

M24C04-WMN6T(A)
M24C32-WMN6T(A)
NJM2068V-TE2
NJM2521M(TE2)
NJM2903M
NJM2903M-TE2
NJM2904M
NJM2904M(TE2)
NJM4558M-T2
NJM4558M-TE2
NJM4558V-TE2
µPC4558G2



8pin SOP

M52055FP
TC74HCT157AF
TC74HCT157AF(EL)
TC74LVX157FT(EL)



16pin SOP

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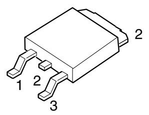

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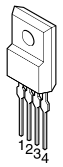

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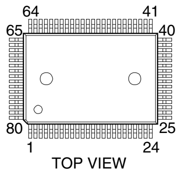
64
41
65
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80
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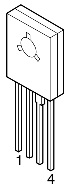
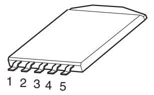
24
TOP VIEW

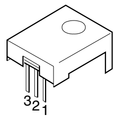
PQ30RV11



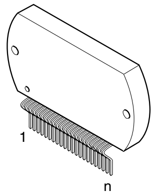
PST9143NL



SBX1971-51P

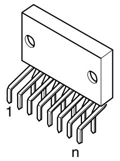


STK392-560



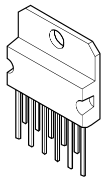
n=18pin

TDA6120Q/N2/S1



n=13pin

TDA7265



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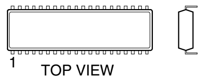
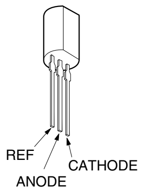
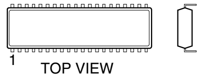


30pin DIP

µPC1093J-1-T

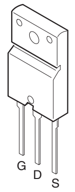

REF
CATHODE
ANODE

µPC393C



8pin DIP

IRFIB7N50A-LF31



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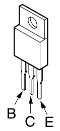
2SC4634LS-CB11
2SC5511



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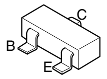
2SA1037AK-T146-R
2SA1226
2SA1226-T1E3E4
2SB709A-QRS-TX
2SC1623-L5L6
2SC2412K-T-146-QR
2SD601A-Q
2SD601A-QRS-TX



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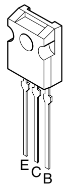
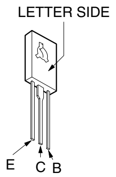
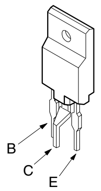
2SC3421-Y



2SC2688(5)-LK


LETTER SIDE
E
C
B

2SC5681-YB



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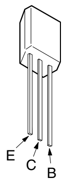
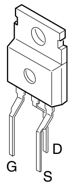
2SD2144S-V



2SJ585LS-CC11



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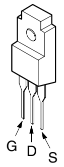

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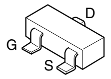
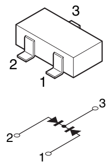
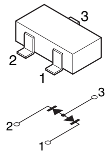


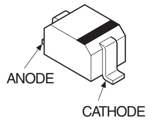
DAN202K
DAN202K-T-146



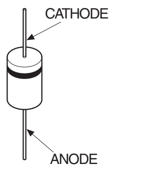
DAP202K
DAP202K-T-146



DTZ10B
MA111-TX
UDZ-TE-17- 8.2B
UDZ-TE-17-7.5B
UDZS-TE17-12B
UDZS-TE17-22B
UDZS-TE17-33B
UDZSTE-1710B
UDZSTE-1720B
UDZSTE-175.1B
UDZSTE-175.6B
UDZSTE-177.5B
UDZSTE-178.2B
1SS355TE-17


ANODE
CATHODE

D1NL20U
D1NL20U-TA2
D2L20U
D2L20U-TA
EL1Z
ERA22-08
ERA22-08TP3
GP08D
GP08DPKG23
MTZJ-T-77-18B
MTZJ-T-77-22B
MTZJ-T-77-5.6B
RGP02-17EL-6433
RGP02-17PKG23
RGP10GPKG23
S2L40F
10ERA60-TP
1SS83
1SS83TD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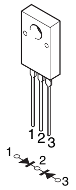
ANODE

D10SC6M



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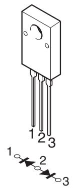

D2L20U-F
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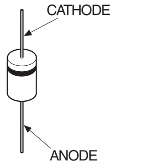
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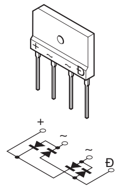
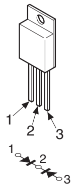
D4SBS4-F
D6SB60LF



D25SC6MF04



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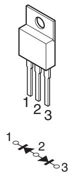

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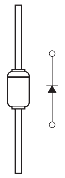

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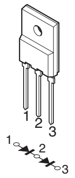
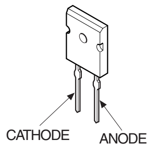
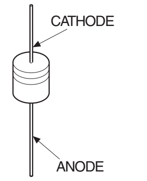


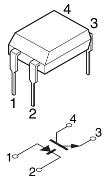
FMQ-G5FMS
PG124S15


CATHODE
ANODE

MTZJ-T-77-15B
MTZJ-T-77-20B
MTZJ-T-77-5.1B
RD15ES-B2
RD18ES-B2
RD20ES-B2
RD5.1ESB2
RD5.6ESB2
1SS133T-77


CATHODE
ANODE

PC123F2
PC123FY2



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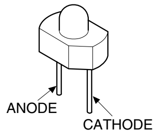
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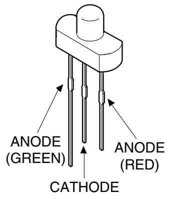
CATHODE

SPR-325MVW


ANODE
(GREEN)
ANODE
(RED)
CATHODE

SECTION 6: EXPLODED VIEWS

Components not identified by a part number or description are not stocked because they are seldom required for routine service.

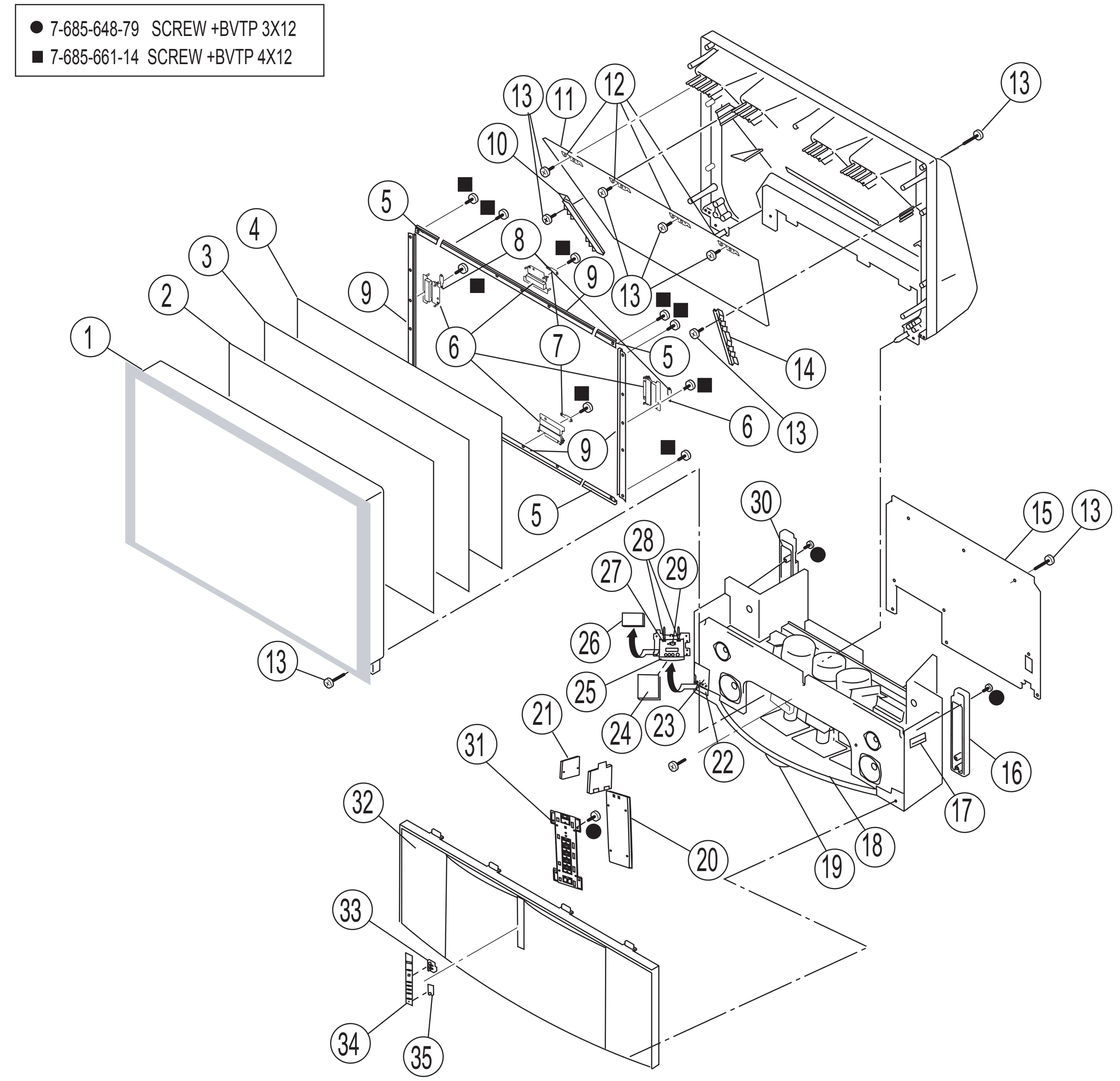
The component parts of an assembly are indicated by the reference numbers in the far right column of the parts list and within the dotted lines of the diagram.

*** Items marked with an asterisk are not stocked since they are seldom required for routine service. Expect some delay when ordering these components.**

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

6-1. COVER (KP-57WV600/57WV700 0NLY)


● 7-685-648-79 SCREW +BVTP 3X12
■ 7-685-661-14 SCREW +BVTP 4X12
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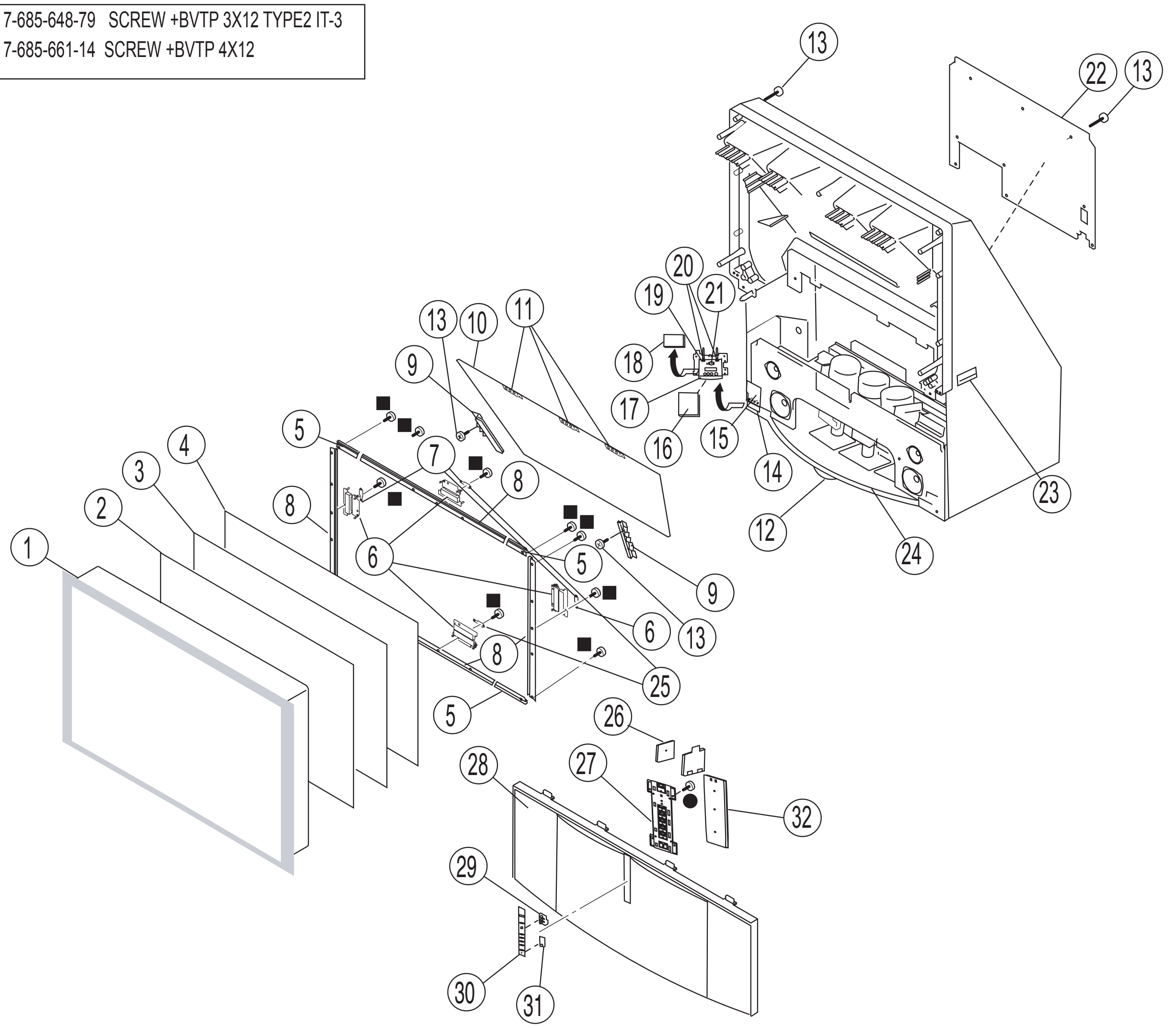
REF.NO.		PART NO.	DESCRIPTION
1		X-4040-450-1	BEZNET ASSY KP-57WV600 ONLY
1		X-4040-448-1	BEZNET ASSY KP-57WV700 ONLY
2		A-1603-725-A	CONTRAST SCREEN ASSY KP-57WV600 ONLY
2		A-1603-723-A	CONTRAST SCREEN ASSY KP-57WV700 ONLY
3		4-088-638-11	PLATE, DIFFUSION (WL) KP-57WV600 ONLY
3		4-088-611-11	PLATE, DIFFUSION (WL) KP-57WV700 ONLY
4		4-088-637-11	PLATE, DIFFUSION (WF) KP-57WV600 ONLY
4		4-088-610-11	PLATE, DIFFUSION (WF) KP-57WV700 ONLY
5	*	4-089-180-01	HOLDER, SCREEN SHORT
6	*	A-1400-759-A	SR MOUNT
7		4-088-460-21	CUSHION, SCREEN
8		4-088-460-31	CUSHION, SCREEN
9	*	4-088-461-01	HOLDER, SCREEN
10	*	4-088-600-01	HOLDER (L), MIRROR
11		4-088-598-01	MIRROR
12	*	4-081-501-01	HOLDER, MIRROR
13		4-081-063-01	SCREW,DOME WASHER HEX TAP 4X20
14	*	4-088-601-01	HOLDER (R), MIRROR
15	*	4-088-115-01	BOARD, REAR KP-57WV600 ONLY
15	*	4-091-605-01	BOARD, REAR KP-57WV700 ONLY
16	*	4-088-630-01	PANEL R, SIDE KP-57WV600 ONLY
16	*	4-088-607-01	PANEL (R), SIDE KP-57WV700 ONLY
17	*	4-088-541-01	HANDLE
18		4-088-631-01	SKIRT, FRONT KP-57WV600 ONLY
18		4-088-603-01	SKIRT, FRONT KP-57WV700 ONLY
19		4-075-020-01	FOOT, PLASTIC
20	*	A-1400-748-A	HA MOUNT
21	*	A-1300-323-A	HM COMPLETE PC BOARD
22		4-088-572-01	LABEL, INPUT TERMINAL
23		4-088-569-01	BRACKET, INPUT TERMINAL
24		4-088-571-01	PLATE, INPUT TERMINAL
25		3-973-975-41	DAMPER, OIL
26	*	A-1400-747-A	HB MOUNT
27		4-088-570-01	COVER, INPUT TERMINAL
28		4-088-573-01	SPRING
29		4-047-464-01	CATCHER, PUSH
30	*	4-088-629-01	PANEL L, SIDE KP-57WV600 ONLY
30	*	4-088-606-01	PANEL (L), SIDE KP-57WV700 ONLY
31		4-088-622-01	BUTTON KP-57WV600 ONLY
31		4-088-585-01	BUTTON KP-57WV700 0NLY
32		X-4040-323-1	GRILLE ASSY, SPEAKER KP-57WV600 ONLY
32		X-4040-326-1	GRILLE ASSY, SPEAKER KP-57WV700 ONLY
33		4-088-588-01	GUIDE, LED
34		4-088-621-01	PANEL, CONTROL KP-57WV600 ONLY
34		4-088-584-01	PANEL, CONTROL KP-57WV700 0NLY
35		4-088-586-01	GUIDE, LED

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

6-2. COVER (KP-65WV600/65WV700 0NLY)

● 7-685-648-79 SCREW +BVTP 3X12 TYPE2 IT-3
■ 7-685-661-14 SCREW +BVTP 4X12



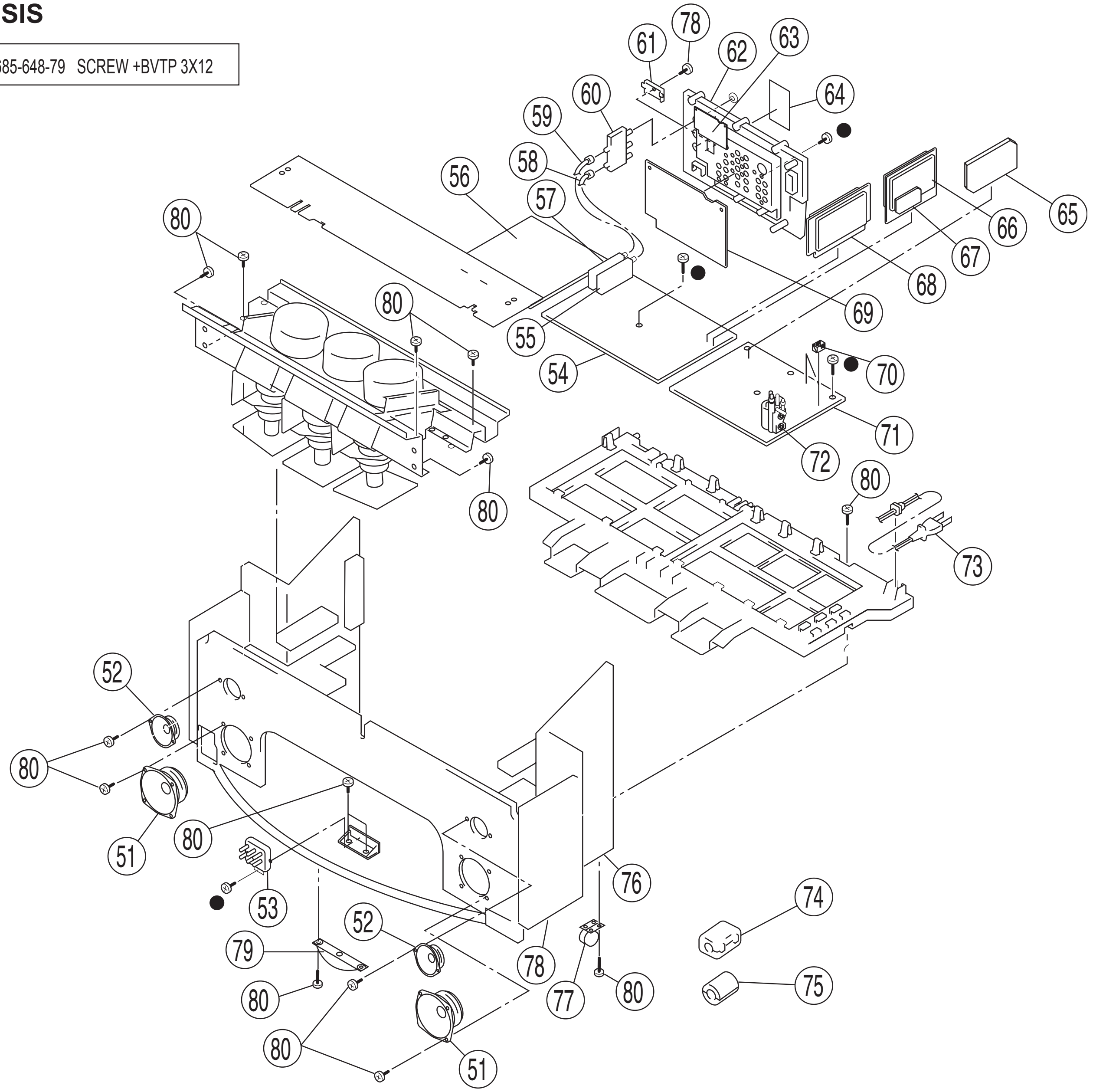
REF.NO.		PART NO.	DESCRIPTION
1		X-4040-449-1	BEZNET ASSY KP-65WV600 ONLY
1		X-4040-447-1	BEZNET ASSY KP-65WV700 ONLY
2		A-1603-724-A	CONTRAST SCREEN ASSY KP-65WV600 ONLY
2		A-1603-722-A	CONTRAST SCREEN ASSY KP-65WV700 ONLY
3		4-088-627-11	PLATE, DIFFUSION (WL) KP-65WV600 ONLY
3		4-088-594-11	PLATE, DIFFUSION (WL) KP-65WV700 ONLY
4		4-088-626-11	PLATE, DIFFUSION (WF) KP-65WV600 ONLY
4		4-088-596-11	PLATE, DIFFUSION (WF) KP-65WV700 ONLY
5	*	4-089-179-01	HOLDER, SCREEN SHORT
6	*	A-1400-759-A	SR MOUNT
7		4-088-460-11	CUSHION, SCREEN
8	*	4-088-461-01	HOLDER, SCREEN
9		4-088-579-01	HOLDER, MIRROR SLIDE
10	*	4-088-577-01	MIRROR
11	*	4-088-580-01	HOLDER, MIRROR BASE
12		4-075-020-01	FOOT, PLASTIC
13		4-081-063-01	SCREW, DOME WASHER HEX TAP 4 X 20
14		4-088-572-01	LABEL, INPUT TERMINAL
15		4-088-569-01	BRACKET, INPUT TERMINAL
16		4-088-571-01	PLATE, INPUT TERMINAL
17		3-973-975-41	DAMPER, OIL
18	*	A-1400-747-A	HB MOUNT
19		4-088-570-01	COVER, INPUT TERMINAL
20		4-088-573-01	SPRING
21		4-047-464-01	CATCHER, PUSH
22	*	4-088-575-01	BOARD, REAR
23	*	4-088-541-01	HANDLE
24		4-088-620-01	SKIRT, FRONT KP-65WV600 ONLY
24		4-088-574-01	SKIRT, FRONT KP-65WV700 ONLY
25		4-088-460-01	CUSHION, SCREEN
26	*	A-1300-323-A	HM COMPLETE PC BOARD
27		4-088-622-01	BUTTON KP-65WV600 ONLY
27		4-088-585-01	BUTTON KP-65WV700 0NLY
28		X-4040-321-1	GRILLE ASSY, SPEAKER KP-65WV600 ONLY
28		X-4040-325-1	GRILLE ASSY, SPEAKER KP-65WV700 ONLY
29		4-088-588-01	GUIDE, LED
30		4-088-621-01	PANEL, CONTROL KP-65WV600 ONLY
30		4-088-584-01	PANEL, CONTROL KP-65WV700 0NLY
31		4-088-586-01	GUIDE, LED
32	*	A-1400-748-A	HA MOUNT

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

6-3. CHASSIS

● 7-685-648-79 SCREW +BVTP 3X12



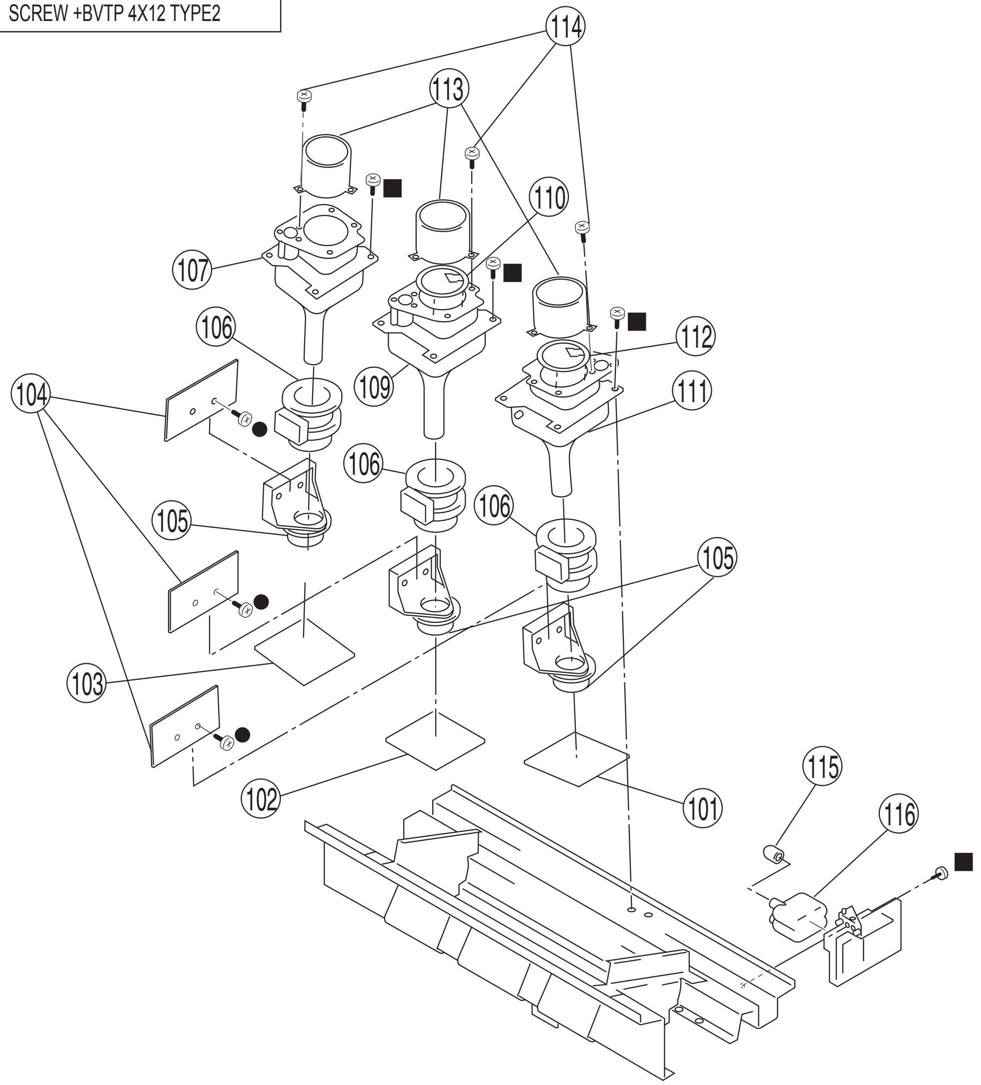
	REF.NO.		PART NO.	DESCRIPTION
	51		1-825-191-11	LOUDSPEAKER (13 CM)
	52		1-825-200-11	LOUDSPEAKER (6.6 CM)
⚠	53		1-223-925-81	RESISTOR ASSY (HIGH-VOLTAGE)
	54	*	A-1300-406-A	A COMPLETE
	55		8-598-593-50	TUNER, FSS BTF-WA421
	56	*	A-1300-410-A	G COMPLETE
	57		8-598-594-30	TUNER, FSS BTF-FA421
	58	*	1-555-400-00	CABLE, PIN
	59	*	1-557-056-31	CABLE, P-P
⚠	60		1-771-787-13	SWITCH, RF ANTENNA
	61		4-069-675-01	CAP, TERMINAL BOARD
	62		4-088-590-01	BOARD, TERMINAL
	63	*	A-1300-324-A	UD COMPLETE PC BOARD
	64		4-088-591-01	LABEL, TERMINAL
	65	*	A-1300-411-A	AD COMPLETE
	66	*	A-1300-407-A	B COMPLETE
	67	*	A-1300-408-A	MS1 COMPLETE
	68	*	A-1300-646-A	M COMPLETE PC BOARD
	69	*	A-1300-321-A	U COMPLETE PC BOARD
	70		3-710-578-01	COVER, VOLUME, 6 MOLD
	71	*	A-1300-560-A	D COMPLETE The high-voltage leads associated with the FBT on this board are not included and must be ordered separately.
⚠	72		1-453-285-51	FBT ASSY, NX-4006//X4P4
⚠			1-779-095-51	LEAD ASSY, HIGH-VOLTAGE
⚠			1-900-260-40	CONNECTOR ASSY, MV
⚠	73		1-769-837-11	CORD, POWER(WITH NOISE FILTER)
	74		1-500-082-11	CLAMP, FERRITE
	75		1-469-241-11	CORE, FERRITE
	76		X-4040-459-1	CABINET ASSY KP-65WV600 ONLY
	76		X-4040-320-1	CABINET ASSY KP-65WV700 ONLY
	77		3-184-556-01	CASTER
	78		4-030-850-01	SOCKET, CASTER
	79		4-075-020-01	FOOT, PLASTIC
	80		4-081-063-01	SCREW,DOME WASHER HEX TAP 4X20 KP-57WV600/57WV700 ONLY

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

6-4. PICTURE TUBE

● 7-685-648-79 SCREW +BVTP 3X12 TYPE2 IT-3
■ 7-685-661-14 SCREW +BVTP 4X12 TYPE2



	REF.NO.		PART NO.	DESCRIPTION
	101		A-1401-420-A	CB MOUNT (VAR) KP-57WV600/57WV700 ONLY
	101		A-1401-387-A	CB MOUNT (VAR) KP-65WV600/65WV700 ONLY
	102		A-1401-419-A	CG MOUNT (VAR) KP-57WV600/57WV700 ONLY
	102		A-1401-386-A	CG MOUNT (VAR) KP-65WV600/65WV700 ONLY
	103	*	A-1401-385-A	CR MOUNT (VAR)
	104	*	A-1401-589-A	VM MOUNT (VAR)
⚠	105		1-452-790-31	NECK ASSY
⚠	106		1-451-537-22	DEFLECTION YOKE
⚠	107		8-733-647-15	CR 07MVC41(B)-L(VM) KP-57WV600 ONLY
⚠	107		8-733-668-15	CR 07MVC42(B)-L KP-57WV700 ONLY
⚠	107		8-733-665-15	CR 07MVC61(B)-L KP-65WV600 ONLY
⚠	107		8-733-663-15	CR 07MVC62(B)-L KP-65WV700 ONLY
⚠	109		8-733-652-15	CR 07MVC21(G)-L(VM) KP-57WV600/65WV600 ONLY
⚠	109		8-733-667-15	CR 07MVC22(G)-L KP-57WV700/65WV700 ONLY
	110		4-088-543-01	SHADE (G) KP-57WV700/65WV700 ONLY
⚠	111		8-733-648-15	CR 07MVC41(R)-L(VM) KP-57WV600 ONLY
⚠	111		8-733-669-15	CR 07MVC42(R)-L KP-57WV700 ONLY
⚠	111		8-733-666-15	CR 07MVC61(R)-L KP-65WV600 ONLY
⚠	111		8-733-664-15	CR 07MVC62(R)-L KP-65WV700 ONLY
	112		4-088-542-01	SHADE (R) KP-57WV700/65WV700 ONLY
	113		4-083-750-01	LENS (DELTA 260) KP-57WV600 ONLY
	113		4-087-841-01	LENS (DELTA 265) KP-57WV700/65WV700 ONLY
	113		4-087-842-01	LENS (DELTA 270) KP-65WV600 ONLY
	114		4-052-894-01	SCREW (4X20), HEAD TAPPING
	115		4-373-137-01	CAP (Z), RUBBER
⚠	116		8-598-955-31	BLOCK ASSY, HV HVB-1031

SECTION 7: ELECTRICAL PARTS LIST

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components in this manual identified by the following symbol: ⧓ indicate parts that have been carefully factory-selected to satisfy regulations regarding X-ray radiation for each set.

Should replacement be required for one of these components, replace only with the value originally used.

*** Items marked with an asterisk are not stocked since they are seldom required for routine service. Expect some delay when ordering these components.**

RESISTORS

- **All resistors are in ohms**
- **F : nonflammable**
- **All variable and adjustable resistors have characteristic curve B, unless otherwise noted.**

VM

When ordering parts by reference number, please include the board name.

VM

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
*		**A-1401-589-A**	**VM BOARD, MOUNTED (VAR)**			
		4-382-854-11	SCREW (M3X10), P, SW (+)			

CAPACITOR

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	C9001	1-126-933-11	ELECT	100µF	20%	16V
	C9002	1-164-156-11	CERAMIC CHIP	0.1µF		25V
	C9003	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
	C9004	1-107-645-11	ELECT	22µF	20%	160V
	C9006	1-161-830-00	CERAMIC	0.0047µF		500V
	C9007	1-164-156-11	CERAMIC CHIP	0.1µF		25V
	C9008	1-126-964-11	ELECT	10µF	20%	50V
	C9009	1-107-636-11	ELECT	10µF	20%	160V
	C9010	1-137-528-11	MYLAR	0.1µF	10%	250V
	C9011	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
	C9012	1-137-528-11	MYLAR	0.1µF	10%	250V
	C9013	1-164-156-11	CERAMIC CHIP	0.1µF		25V
	C9014	1-117-450-11	MYLAR	0.47µF	10%	250V

CONNECTOR

	REF. NO.	PART NO.	DESCRIPTION	VALUES
*	CN9001	1-564-508-11	PLUG,CONNECTOR	5P
*	CN9002	1-564-506-11	PLUG,CONNECTOR	3P
*	CN9003	1-770-723-11	CONNECTOR, BOARD TO BOARD	8P

FERRITE BEAD

REF. NO.	PART NO.	DESCRIPTION	VALUES
FB9001	1-469-869-21	FERRITE	0µH
FB9002	1-469-869-21	FERRITE	0µH

TRANSISTOR

REF. NO.	PART NO.	DESCRIPTION
Q9001	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX
Q9002	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX
Q9003	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX
Q9004	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX
Q9005	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX
Q9006	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX
Q9007	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX
Q9008	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX
Q9009	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX
Q9010	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX
Q9011	8-729-045-05	TRANSISTOR 2SA2005
Q9012	8-729-045-04	TRANSISTOR 2SC5511

RESISTOR

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R9001	1-249-381-11	CARBON	1	5%	1/4W
R9002	1-216-820-11	RES-CHIP	820	5%	1/10W
R9003	1-216-819-11	RES-CHIP	680	5%	1/10W
R9004	1-216-834-11	RES-CHIP	12K	5%	1/10W
R9005	1-216-839-11	RES-CHIP	33K	5%	1/10W
R9006	1-216-811-11	RES-CHIP	150	5%	1/10W
R9008	1-216-815-11	RES-CHIP	330	5%	1/10W
R9009	1-216-813-11	RES-CHIP	220	5%	1/10W
R9010	1-216-813-11	RES-CHIP	220	5%	1/10W
R9011	1-249-391-11	CARBON	6.8	5%	1/4W
R9012	1-249-391-11	CARBON	6.8	5%	1/4W
R9013	1-249-391-11	CARBON	6.8	5%	1/4W
R9014	1-249-391-11	CARBON	6.8	5%	1/4W
R9015	1-249-391-11	CARBON	6.8	5%	1/4W
R9016	1-249-391-11	CARBON	6.8	5%	1/4W
R9017	1-249-391-11	CARBON	6.8	5%	1/4W
R9018	1-249-391-11	CARBON	6.8	5%	1/4W
R9019	1-216-848-11	RES-CHIP	180K	5%	1/10W
R9020	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R9021	1-216-805-11	RES-CHIP	47	5%	1/10W
R9022	1-216-805-11	RES-CHIP	47	5%	1/10W
R9023	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R9024	1-216-848-11	RES-CHIP	180K	5%	1/10W
R9025	1-215-890-11	METAL OXIDE	470	5%	2W
R9026	1-216-847-11	RES-CHIP	150K	5%	1/10W
R9027	1-216-847-11	RES-CHIP	150K	5%	1/10W

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

CR

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
*		**A-1401-385-A**	**CR BOARD, MOUNTED (VAR)**			
		4-382-854-11	SCREW (M3X10), P, SW (+)			

CAPACITOR

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	C9101	1-104-570-11	CERAMIC	0.001µF	10%	2KV
	C9102	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
	C9103	1-164-156-11	CERAMIC CHIP	0.1µF		25V
	C9105	1-107-962-11	ELECT	22µF	20%	250V
	C9106	1-161-830-00	CERAMIC	0.0047µF		500V
	C9107	1-101-003-00	CERAMIC	0.0047µF		50V
	C9108	1-126-935-11	ELECT	470µF	20%	16V
	C9110	1-164-156-11	CERAMIC CHIP	0.1µF		25V
	C9111	1-164-156-11	CERAMIC CHIP	0.1µF		25V
	C9112	1-126-933-11	ELECT	100µF	20%	16V
	C9114	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
	C9115	1-101-003-00	CERAMIC	0.0047µF		50V
	C9117	1-164-156-11	CERAMIC CHIP	0.1µF		25V

CONNECTOR

	REF. NO.	PART NO.	DESCRIPTION	VALUES
*	CN9101	1-564-511-11	PLUG,CONNECTOR	8P
*	CN9102	1-564-507-11	PLUG,CONNECTOR	4P
*	CN9103	1-564-508-11	PLUG,CONNECTOR	5P
	CN9104	1-695-915-11	TAB (CONTACT)	
	CN9107	1-785-879-11	CONNECTOR, ONE TOUCH	
	CN9110	1-695-915-11	TAB (CONTACT)	

DIODE

	REF. NO.	PART NO.	DESCRIPTION	VALUES
	D9101	8-719-901-83	DIODE 1SS83TD	
	D9104	8-719-901-83	DIODE 1SS83TD	
	D9109	8-719-404-50	DIODE MA111-TX	

FERRITE BEAD

	REF. NO.	PART NO.	DESCRIPTION	VALUES
	FB9101	1-410-397-21	FERRITE	1.1µH

IC

	REF. NO.	PART NO.	DESCRIPTION	VALUES
	IC9101	8-759-680-01	IC TDA6120Q/N2/S1	

JACK

	REF. NO.	PART NO.	DESCRIPTION	VALUES
⚠	J9101	1-251-182-41	SOCKET, CRT	

COIL

	REF. NO.	PART NO.	DESCRIPTION	VALUES
	L9101	1-414-856-11	INDUCTOR	10µH
	L9102	1-414-855-31	INDUCTOR	1µH
	L9103	1-414-856-11	INDUCTOR	10µH

NEON LAMP

REF. NO.	PART NO.	DESCRIPTION	VALUES
NL9102	1-517-778-21	LAMP, NEON	
NL9103	1-517-778-21	LAMP, NEON	

TRANSISTOR

REF. NO.	PART NO.	DESCRIPTION	VALUES
Q9101	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q9102	8-729-028-28	TRANSISTOR 2SK2036(TE85L)	
Q9103	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q9104	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q9105	8-729-122-63	TRANSISTOR 2SA1226-T1E4	

RESISTOR

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R9101	1-260-133-11	CARBON	680K	5%	1/2W
R9102	1-249-425-11	CARBON	4.7K	5%	1/4W
R9103	1-216-809-11	RES-CHIP	100	5%	1/10W
R9104	1-260-132-11	CARBON	560K	5%	1/2W
R9105	1-218-696-11	METAL CHIP	1.5K	0.50%	1/16W
R9106	1-218-680-11	METAL CHIP	330	0.50%	1/16W
R9107	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R9108	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R9109	1-218-690-11	METAL CHIP	820	0.50%	1/16W
R9114	1-218-700-11	METAL CHIP	2.2K	0.50%	1/16W
R9115	1-218-708-11	METAL CHIP	4.7K	0.50%	1/16W
R9116	1-260-328-11	CARBON	1K	5%	1/2W
R9120	1-215-926-00	METAL OXIDE	33K	5%	3W
R9121	1-260-087-11	CARBON	100	5%	1/2W
R9122	1-260-320-11	CARBON	220	5%	1/2W
R9126	1-218-748-11	METAL CHIP	220K	0.50%	1/16W
R9127	1-218-748-11	METAL CHIP	220K	0.50%	1/16W
R9129	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R9131	1-216-823-11	RES-CHIP	1.5K	5%	1/10W
R9132	1-216-833-11	RES-CHIP	10K	5%	1/10W
R9133	1-216-809-11	RES-CHIP	100	5%	1/10W
R9134	1-216-821-11	RES-CHIP	1K	5%	1/10W
R9135	1-260-087-11	CARBON	100	5%	1/2W
R9136	1-218-700-11	METAL CHIP	2.2K	0.50%	1/16W
R9137	1-218-700-11	METAL CHIP	2.2K	0.50%	1/16W

SPARK GAP

REF. NO.	PART NO.	DESCRIPTION	VALUES
SG9101	1-517-729-31	GAP, SPARK	
SG9102	1-519-422-11	GAP, SPARK	

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NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

CG

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
*		**A-1401-386-A**	**CG BOARD, MOUNTED (VAR)**			
		(KV-65WV600/65WV700 ONLY)				
*		**A-1401-419-A**	**CG BOARD, MOUNTED (VAR)**			
		(KV-57WV600/57WV700 ONLY)				
		4-382-854-11	SCREW (M3X10), P, SW (+)			
		CAPACITOR				
	C9201	1-107-662-11	ELECT	22µF	20%	250V
	C9202	1-104-570-11	CERAMIC	0.001µF	10%	2KV
	C9203	1-164-156-11	CERAMIC CHIP	0.1µF		25V
	C9204	1-126-935-11	ELECT	470µF	20%	16V
	C9205	1-164-378-11	CERAMIC CHIP	30pF	5%	50V
	C9207	1-164-156-11	CERAMIC CHIP	0.1µF		25V
	C9208	1-164-156-11	CERAMIC CHIP	0.1µF		25V
	C9209	1-101-003-00	CERAMIC	0.0047µF		50V
	C9211	1-126-933-11	ELECT	100µF	20%	16V
	C9213	1-161-830-00	CERAMIC	0.0047µF		500V
	C9214	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
	C9216	1-101-003-00	CERAMIC	0.0047µF		50V
	C9217	1-164-156-11	CERAMIC CHIP	0.1µF		25V
		CONNECTOR				
*	CN9201	1-564-511-11	PLUG,CONNECTOR	8P		
*	CN9202	1-564-511-11	PLUG,CONNECTOR	8P		
*	CN9203	1-564-507-11	PLUG,CONNECTOR	4P		
*	CN9204	1-564-507-11	PLUG,CONNECTOR	4P		
*	CN9205	1-564-506-11	PLUG,CONNECTOR	3P		
*	CN9206	1-564-509-11	PLUG,CONNECTOR	6P		
	CN9208	1-695-915-11	TAB (CONTACT)			
	CN9209	1-785-879-11	CONNECTOR, ONE TOUCH			
	CN9210	1-695-915-11	TAB (CONTACT)			
		DIODE				
	D9201	8-719-901-83	DIODE 1SS83TD			
	D9206	8-719-901-83	DIODE 1SS83TD			
	D9209	8-719-404-50	DIODE MA111-TX			
		FERRITE BEAD				
	FB9201	1-410-397-21	FERRITE	1.1µH		
		IC				
	IC9201	8-759-680-01	IC TDA6120Q/N2/S1			
		JACK				
⚠	J9201	1-251-182-41	SOCKET, CRT			

REF. NO.	PART NO.	DESCRIPTION	VALUES		
	COIL				
L9201	1-414-856-11	INDUCTOR	10µH		
L9202	1-414-855-31	INDUCTOR	1µH		
L9203	1-414-856-11	INDUCTOR	10µH		
	NEON LAMP				
NL9202	1-517-778-21	LAMP, NEON			
NL9203	1-517-778-21	LAMP, NEON			
	TRANSISTOR				
Q9201	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q9202	8-729-028-28	TRANSISTOR 2SK2036(TE85L)			
Q9203	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR			
Q9204	8-729-122-63	TRANSISTOR 2SA1226-T1E4			
	RESISTOR				
R9201	1-260-133-11	CARBON	680K	5%	1/2W
R9202	1-260-132-11	CARBON	560K	5%	1/2W
R9203	1-249-425-11	CARBON	4.7K	5%	1/4W
R9204	1-216-809-11	RES-CHIP	100	5%	1/10W
R9205	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R9206	1-218-677-11	METAL CHIP	240	0.50%	1/16W
	(KP-65WV600/65WV700 ONLY)				
R9206	1-218-679-11	METAL CHIP	300	0.50%	1/16W
	(KP-57WV600/57WV700 ONLY)				
R9207	1-218-694-11	METAL CHIP	1.2K	0.50%	1/16W
R9208	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R9209	1-218-690-11	METAL CHIP	820	0.50%	1/16W
R9216	1-218-699-11	METAL CHIP	2K	0.50%	1/16W
R9217	1-218-708-11	METAL CHIP	4.7K	0.50%	1/16W
R9220	1-215-926-00	METAL OXIDE	33K	5%	3W
R9221	1-260-328-11	CARBON	1K	5%	1/2W
R9222	1-260-087-11	CARBON	100	5%	1/2W
R9223	1-260-320-11	CARBON	220	5%	1/2W
R9225	1-218-744-11	METAL CHIP	150K	0.50%	1/16W
R9226	1-218-744-11	METAL CHIP	150K	0.50%	1/16W
R9228	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R9230	1-216-823-11	RES-CHIP	1.5K	5%	1/10W
R9231	1-260-087-11	CARBON	100	5%	1/2W
R9232	1-218-700-11	METAL CHIP	2.2K	0.50%	1/16W
R9233	1-218-700-11	METAL CHIP	2.2K	0.50%	1/16W
	SPARK GAP				
SG9201	1-517-729-31	GAP, SPARK			
SG9202	1-519-422-11	GAP, SPARK			

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

CB

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
*		**A-1401-387-A**	**CB BOARD, MOUNTED (VAR)**			
		(KV-65WV600/65WV700 ONLY)				
*		**A-1401-420-A**	**CB BOARD, MOUNTED (VAR)**			
		(KV-57WV600/57WV700 ONLY)				
		4-382-854-11	SCREW (M3X10), P, SW (+)			
		CAPACITOR				
	C9301	1-104-570-11	CERAMIC	0.001μF	10%	2KV
	C9302	1-101-003-00	CERAMIC	0.0047μF		50V
	C9303	1-107-662-11	ELECT	22μF	20%	250V
	C9304	1-162-920-11	CERAMIC CHIP	27pF	5%	50V
	C9305	1-162-916-11	CERAMIC CHIP	12pF	5%	50V
	C9306	1-164-156-11	CERAMIC CHIP	0.1μF		25V
	C9307	1-126-935-11	ELECT	470μF	20%	16V
	C9309	1-164-156-11	CERAMIC CHIP	0.1μF		25V
	C9310	1-164-156-11	CERAMIC CHIP	0.1μF		25V
	C9311	1-126-933-11	ELECT	100μF	20%	16V
	C9312	1-161-830-00	CERAMIC	0.0047μF		500V
	C9313	1-164-156-11	CERAMIC CHIP	0.1μF		25V
	C9314	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
	C9315	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
	C9316	1-101-003-00	CERAMIC	0.0047μF		50V
	C9318	1-164-156-11	CERAMIC CHIP	0.1μF		25V
	C9320	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V
		CONNECTOR				
*	CN9301	1-564-510-11	PLUG,CONNECTOR	7P		
*	CN9302	1-564-511-11	PLUG,CONNECTOR	8P		
*	CN9303	1-564-507-11	PLUG,CONNECTOR	4P		
	CN9304	1-695-915-11	TAB (CONTACT)			
	CN9308	1-785-879-11	CONNECTOR, ONE TOUCH			
*	CN9309	1-564-507-11	PLUG,CONNECTOR	4P		
	CN9310	1-695-915-11	TAB (CONTACT)			
		DIODE				
	D9301	8-719-404-50	DIODE MA111-TX			
	D9302	8-719-901-83	DIODE 1SS83TD			
	D9303	8-719-404-50	DIODE MA111-TX			
	D9309	8-719-901-83	DIODE 1SS83TD			
	D9310	8-719-404-50	DIODE MA111-TX			
		FERRITE BEAD				
	FB9301	1-410-397-21	FERRITE	1.1μH		

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
		IC				
	IC9301	8-759-680-01	IC TDA6120Q/N2/S1			
		JACK				
⚠	J9301	1-251-182-41	SOCKET, CRT			
		COIL				
	L9301	1-414-856-11	INDUCTOR	10μH		
	L9302	1-414-855-31	INDUCTOR	1μH		
	L9303	1-414-856-11	INDUCTOR	10μH		
		NEON LAMP				
	NL9302	1-517-778-21	LAMP, NEON			
	NL9303	1-517-778-21	LAMP, NEON			
		TRANSISTOR				
	Q9301	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
	Q9302	8-729-028-28	TRANSISTOR 2SK2036(TE85L)			
	Q9303	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
	Q9304	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
	Q9305	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR			
	Q9306	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR			
	Q9307	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR			
	Q9308	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
	Q9309	8-729-122-63	TRANSISTOR 2SA1226-T1E4			
		RESISTOR				
	R9301	1-216-809-11	RES-CHIP	100	5%	1/10W
	R9302	1-218-680-11	METAL CHIP	330	0.50%	1/16W
	R9303	1-260-133-11	CARBON	680K	5%	1/2W
	R9304	1-260-132-11	CARBON	560K	5%	1/2W
	R9306	1-218-682-11	METAL CHIP	390	0.50%	1/16W
		(KP-65WV600/65WV700 ONLY)				
	R9306	1-218-684-11	METAL CHIP	470	0.50%	1/16W
		(KP-57WV600/57WV700 ONLY)				
	R9307	1-218-696-11	METAL CHIP	1.5K	0.50%	1/16W
	R9308	1-218-684-11	METAL CHIP	470	0.50%	1/16W
	R9309	1-218-698-11	METAL CHIP	1.8K	0.50%	1/16W
	R9313	1-218-724-11	METAL CHIP	22K	0.50%	1/16W
	R9314	1-218-704-11	METAL CHIP	3.3K	0.50%	1/16W
	R9315	1-218-706-11	METAL CHIP	3.9K	0.50%	1/16W
	R9316	1-218-698-11	METAL CHIP	1.8K	0.50%	1/16W
	R9317	1-218-708-11	METAL CHIP	4.7K	0.50%	1/16W

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R9318	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R9319	1-249-425-11	CARBON	4.7K	5%	1/4W
R9320	1-215-926-00	METAL OXIDE	33K	5%	3W
R9323	1-260-328-11	CARBON	1K	5%	1/2W
R9324	1-260-087-11	CARBON	100	5%	1/2W
R9325	1-260-320-11	CARBON	220	5%	1/2W
R9327	1-218-749-11	METAL CHIP	240K	0.50%	1/16W
R9328	1-218-749-11	METAL CHIP	240K	0.50%	1/16W
R9330	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R9332	1-216-823-11	RES-CHIP	1.5K	5%	1/10W
R9333	1-218-699-11	METAL CHIP	2K	0.50%	1/16W
R9334	1-216-822-11	RES-CHIP	1.2K	5%	1/10W
⚠ R9335	1-249-393-11	CARBON	10	5%	1/4W
R9336	1-216-833-11	RES-CHIP	10K	5%	1/10W
R9337	1-216-833-11	RES-CHIP	10K	5%	1/10W
R9338	1-216-821-11	RES-CHIP	1K	5%	1/10W
R9339	1-260-087-11	CARBON	100	5%	1/2W
R9340	1-216-833-11	RES-CHIP	10K	5%	1/10W
R9341	1-216-821-11	RES-CHIP	1K	5%	1/10W
R9342	1-216-834-11	RES-CHIP	12K	5%	1/10W
R9343	1-216-833-11	RES-CHIP	10K	5%	1/10W
R9344	1-216-845-11	RES-CHIP	100K	5%	1/10W
R9345	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R9346	1-216-833-11	RES-CHIP	10K	5%	1/10W
R9347	1-216-809-11	RES-CHIP	100	5%	1/10W
R9348	1-216-821-11	RES-CHIP	1K	5%	1/10W
R9349	1-216-805-11	RES-CHIP	47	5%	1/10W
R9350	1-218-700-11	METAL CHIP	2.2K	0.50%	1/16W
R9351	1-218-700-11	METAL CHIP	2.2K	0.50%	1/16W

SPARK GAP

REF. NO.	PART NO.	DESCRIPTION
SG9301	1-517-729-31	GAP, SPARK
SG9302	1-519-422-11	GAP, SPARK

U

*** A-1300-321-A U BOARD, COMPLETE**

CAPACITOR

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C1501	1-109-982-11	CERAMIC CHIP	1μF	10%	10V
C1502	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C1503	1-109-982-11	CERAMIC CHIP	1μF	10%	10V
C1504	1-109-982-11	CERAMIC CHIP	1μF	10%	10V
C1505	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C1506	1-109-982-11	CERAMIC CHIP	1μF	10%	10V
C1507	1-109-982-11	CERAMIC CHIP	1μF	10%	10V
C1508	1-126-960-11	ELECT	1μF	20%	50V
C1509	1-126-960-11	ELECT	1μF	20%	50V
C1510	1-126-960-11	ELECT	1μF	20%	50V
C1511	1-126-960-11	ELECT	1μF	20%	50V
C1512	1-126-960-11	ELECT	1μF	20%	50V
C1513	1-126-960-11	ELECT	1μF	20%	50V
C1519	1-162-913-11	CERAMIC CHIP	8pF	0.50pF	50V
C1520	1-162-913-11	CERAMIC CHIP	8pF	0.50pF	50V
C1521	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C1522	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C1523	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C1524	1-109-982-11	CERAMIC CHIP	1μF	10%	10V
C1525	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C1526	1-126-964-11	ELECT	10μF	20%	50V
C1527	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C1528	1-126-933-11	ELECT	100μF	20%	16V
C1529	1-109-982-11	CERAMIC CHIP	1μF	10%	10V
C1530	1-126-964-11	ELECT	10μF	20%	50V
C1531	1-126-941-11	ELECT	470μF	20%	25V
C1532	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C1533	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C1534	1-126-933-11	ELECT	100μF	20%	16V
C1535	1-126-933-11	ELECT	100μF	20%	16V
C1536	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C1537	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C1538	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C1539	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C1540	1-126-933-11	ELECT	100μF	20%	16V
C1541	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C1542	1-126-960-11	ELECT	1μF	20%	50V
C1544	1-126-960-11	ELECT	1μF	20%	50V
C1545	1-126-933-11	ELECT	100μF	20%	16V
C1546	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C1548	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C1550	1-126-960-11	ELECT	1μF	20%	50V
C1551	1-126-960-11	ELECT	1μF	20%	50V
C1552	1-126-960-11	ELECT	1μF	20%	50V
C1553	1-126-960-11	ELECT	1μF	20%	50V
C1554	1-126-960-11	ELECT	1μF	20%	50V
C1555	1-126-960-11	ELECT	1μF	20%	50V
C1556	1-126-933-11	ELECT	100μF	20%	16V
C1557	1-164-156-11	CERAMIC CHIP	0.1μF		25V

REF. NO.	PART NO.	DESCRIPTION	VALUES
C1558	1-126-933-11	ELECT	100µF 20% 16V
C1559	1-126-933-11	ELECT	100µF 20% 16V
C1560	1-126-933-11	ELECT	100µF 20% 16V
C1561	1-126-933-11	ELECT	100µF 20% 16V
C1562	1-126-933-11	ELECT	100µF 20% 16V
C1563	1-126-933-11	ELECT	100µF 20% 16V
	CONNECTOR		
CN1501	1-764-334-11	PLUG,CONNECTOR	11P
CN1502	1-793-173-11	PIN, PCCONNECTOR(PC BOARD)	50P
CN1503	1-793-419-11	CONNECTOR, BOARD TO BOARD	4P
	DIODE		
D1501	8-719-977-28	DIODE UDZSTE-1710B	
D1502	8-719-977-28	DIODE UDZSTE-1710B	
D1503	8-719-977-28	DIODE UDZSTE-1710B	
D1504	8-719-977-28	DIODE UDZSTE-1710B	
D1505	8-719-977-28	DIODE UDZSTE-1710B	
D1506	8-719-977-28	DIODE UDZSTE-1710B	
D1507	8-719-977-28	DIODE UDZSTE-1710B	
D1508	8-719-977-28	DIODE UDZSTE-1710B	
D1509	8-719-977-28	DIODE UDZSTE-1710B	
D1510	8-719-977-28	DIODE UDZSTE-1710B	
D1511	8-719-977-28	DIODE UDZSTE-1710B	
D1512	8-719-977-28	DIODE UDZSTE-1710B	
D1513	8-719-977-28	DIODE UDZSTE-1710B	
D1514	8-719-977-28	DIODE UDZSTE-1710B	
D1515	8-719-977-28	DIODE UDZSTE-1710B	
D1516	8-719-977-28	DIODE UDZSTE-1710B	
D1517	8-719-977-28	DIODE UDZSTE-1710B	
D1518	8-719-914-43	DIODE DAN202K-T-146	
D1519	8-719-977-28	DIODE UDZSTE-1710B	
D1520	8-719-977-28	DIODE UDZSTE-1710B	
D1521	8-719-977-28	DIODE UDZSTE-1710B	
D1522	8-719-977-28	DIODE UDZSTE-1710B	
D1523	8-719-977-28	DIODE UDZSTE-1710B	
D1524	8-719-977-28	DIODE UDZSTE-1710B	
D1525	8-719-977-28	DIODE UDZSTE-1710B	
D1526	8-719-977-28	DIODE UDZSTE-1710B	
D1527	8-719-069-61	DIODE UDZSTE-1710B	
D1528	8-719-069-61	DIODE UDZSTE-1710B	
D1529	8-719-069-61	DIODE UDZSTE-1710B	
D1530	8-719-069-61	DIODE UDZSTE-1710B	
D1531	8-719-069-61	DIODE UDZSTE-1710B	
D1532	8-719-069-61	DIODE UDZSTE-1710B	
D1533	8-719-977-28	DIODE UDZSTE-1710B	
D1534	8-719-977-28	DIODE UDZSTE-1710B	
D1535	8-719-977-28	DIODE UDZSTE-1710B	
	IC		
IC1502	8-752-080-04	IC CXA2069Q	
IC1505	8-759-548-56	IC M52055FP	
	JACK		
J1501	1-573-967-12	BLOCK, (S) TERMINAL	
J1502	1-750-516-21	JACK BLOCK, PIN	2P
J1503	1-750-517-21	JACK BLOCK, PIN	3P
J1504	1-750-517-21	JACK BLOCK, PIN	3P
J1505	1-764-143-11	JACK	
J1506	1-764-143-11	JACK	
J1507	1-750-516-21	JACKBLOCK, PIN	2P
J1508	1-774-358-11	JACK BLOCK, PIN	
J1509	1-774-358-11	JACK BLOCK, PIN	
	COIL		
L1502	1-469-555-21	INDUCTOR	10µH
L1503	1-469-555-21	INDUCTOR	10µH
L1504	1-469-555-21	INDUCTOR	10µH
L1505	1-469-555-21	INDUCTOR	10µH
L1506	1-469-555-21	INDUCTOR	10µH
	TRANSISTOR		
Q1501	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q1502	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q1503	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q1504	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q1505	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1506	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1507	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q1508	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1509	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1510	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1511	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q1512	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q1513	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q1515	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q1516	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	

REF. NO.	PART NO.	DESCRIPTION	VALUES		
Q1518	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q1519	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q1520	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q1521	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q1522	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q1523	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q1524	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			

RESISTOR

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R1501	1-216-853-11	RES-CHIP	470K	5%	1/10W
R1502	1-216-853-11	RES-CHIP	470K	5%	1/10W
R1503	1-218-665-11	METAL CHIP	75	0.50%	1/16W
R1504	1-218-665-11	METAL CHIP	75	0.50%	1/16W
R1505	1-218-665-11	METAL CHIP	75	0.50%	1/16W
R1506	1-216-853-11	RES-CHIP	470K	5%	1/10W
R1507	1-216-853-11	RES-CHIP	470K	5%	1/10W
R1508	1-218-665-11	METAL CHIP	75	0.50%	1/16W
R1509	1-218-665-11	METAL CHIP	75	0.50%	1/16W
R1510	1-218-665-11	METAL CHIP	75	0.50%	1/16W
R1511	1-216-853-11	RES-CHIP	470K	5%	1/10W
R1512	1-216-853-11	RES-CHIP	470K	5%	1/10W
R1513	1-218-665-11	METAL CHIP	75	0.50%	1/16W
R1514	1-216-821-11	RES-CHIP	1K	5%	1/10W
R1520	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R1521	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R1522	1-216-824-11	RES-CHIP	1.8K	5%	1/10W
R1523	1-216-824-11	RES-CHIP	1.8K	5%	1/10W
R1524	1-216-809-11	RES-CHIP	100	5%	1/10W
R1525	1-216-809-11	RES-CHIP	100	5%	1/10W
R1526	1-216-821-11	RES-CHIP	1K	5%	1/10W
R1527	1-216-821-11	RES-CHIP	1K	5%	1/10W
R1530	1-216-809-11	RES-CHIP	100	5%	1/10W
R1531	1-216-809-11	RES-CHIP	100	5%	1/10W
R1532	1-216-809-11	RES-CHIP	100	5%	1/10W
R1533	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R1534	1-216-833-11	RES-CHIP	10K	5%	1/10W
R1535	1-216-821-11	RES-CHIP	1K	5%	1/10W
R1536	1-216-821-11	RES-CHIP	1K	5%	1/10W
R1537	1-216-821-11	RES-CHIP	1K	5%	1/10W
R1538	1-216-806-11	RES-CHIP	56	5%	1/10W
R1539	1-216-805-11	RES-CHIP	47	5%	1/10W
R1540	1-216-809-11	RES-CHIP	100	5%	1/10W
R1541	1-216-809-11	RES-CHIP	100	5%	1/10W
R1542	1-216-830-11	RES-CHIP	5.6K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R1543	1-216-809-11	RES-CHIP	100	5%	1/10W
R1544	1-216-830-11	RES-CHIP	5.6K	5%	1/10W
R1545	1-216-830-11	RES-CHIP	5.6K	5%	1/10W
R1546	1-216-809-11	RES-CHIP	100	5%	1/10W
R1547	1-216-830-11	RES-CHIP	5.6K	5%	1/10W
R1548	1-216-841-11	RES-CHIP	47K	5%	1/10W
R1549	1-216-809-11	RES-CHIP	100	5%	1/10W
R1550	1-216-809-11	RES-CHIP	100	5%	1/10W
R1551	1-216-853-11	RES-CHIP	470K	5%	1/10W
R1552	1-216-821-11	RES-CHIP	1K	5%	1/10W
R1554	1-216-809-11	RES-CHIP	100	5%	1/10W
R1555	1-216-853-11	RES-CHIP	470K	5%	1/10W
R1556	1-216-853-11	RES-CHIP	470K	5%	1/10W
R1557	1-216-830-11	RES-CHIP	5.6K	5%	1/10W
R1558	1-216-821-11	RES-CHIP	1K	5%	1/10W
R1559	1-218-665-11	METAL CHIP	75	0.50%	1/16W
R1560	1-216-845-11	RES-CHIP	100K	5%	1/10W
R1562	1-216-809-11	RES-CHIP	100	5%	1/10W
R1563	1-216-830-11	RES-CHIP	5.6K	5%	1/10W
R1565	1-216-809-11	RES-CHIP	100	5%	1/10W
R1566	1-216-809-11	RES-CHIP	100	5%	1/10W
R1567	1-216-833-11	RES-CHIP	10K	5%	1/10W
R1568	1-216-821-11	RES-CHIP	1K	5%	1/10W
R1569	1-216-809-11	RES-CHIP	100	5%	1/10W
R1570	1-216-809-11	RES-CHIP	100	5%	1/10W
R1571	1-216-809-11	RES-CHIP	100	5%	1/10W
R1572	1-216-809-11	RES-CHIP	100	5%	1/10W
R1573	1-216-830-11	RES-CHIP	5.6K	5%	1/10W
R1574	1-216-809-11	RES-CHIP	100	5%	1/10W
R1575	1-216-809-11	RES-CHIP	100	5%	1/10W
R1576	1-216-833-11	RES-CHIP	10K	5%	1/10W
R1577	1-216-830-11	RES-CHIP	5.6K	5%	1/10W
R1578	1-216-857-11	RES-CHIP	1M	5%	1/10W
R1579	1-216-842-11	RES-CHIP	56K	5%	1/10W
R1580	1-216-809-11	RES-CHIP	100	5%	1/10W
R1581	1-216-821-11	RES-CHIP	1K	5%	1/10W
R1582	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R1583	1-216-809-11	RES-CHIP	100	5%	1/10W
R1584	1-216-830-11	RES-CHIP	5.6K	5%	1/10W
R1585	1-216-821-11	RES-CHIP	1K	5%	1/10W
R1586	1-216-813-11	RES-CHIP	220	5%	1/10W
R1587	1-216-809-11	RES-CHIP	100	5%	1/10W
R1588	1-216-830-11	RES-CHIP	5.6K	5%	1/10W
R1589	1-216-813-11	RES-CHIP	220	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R1590	1-216-809-11	RES-CHIP	100	5%	1/10W
R1591	1-216-813-11	RES-CHIP	220	5%	1/10W
R1592	1-216-833-11	RES-CHIP	10K	5%	1/10W
R1593	1-216-809-11	RES-CHIP	100	5%	1/10W
R1594	1-216-830-11	RES-CHIP	5.6K	5%	1/10W
R1595	1-216-830-11	RES-CHIP	5.6K	5%	1/10W
R1596	1-216-830-11	RES-CHIP	5.6K	5%	1/10W
R1597	1-216-809-11	RES-CHIP	100	5%	1/10W
R1598	1-216-830-11	RES-CHIP	5.6K	5%	1/10W
R1600	1-216-809-11	RES-CHIP	100	5%	1/10W
R1604	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R1607	1-216-845-11	RES-CHIP	100K	5%	1/10W
R1608	1-216-849-11	RES-CHIP	220K	5%	1/10W
R1609	1-216-833-11	RES-CHIP	10K	5%	1/10W
R1610	1-216-849-11	RES-CHIP	220K	5%	1/10W
R1612	1-216-849-11	RES-CHIP	220K	5%	1/10W
R1613	1-216-845-11	RES-CHIP	100K	5%	1/10W
R1615	1-216-841-11	RES-CHIP	47K	5%	1/10W
R1616	1-216-833-11	RES-CHIP	10K	5%	1/10W
R1617	1-216-845-11	RES-CHIP	100K	5%	1/10W
R1618	1-216-864-11	SHORT CHIP	0		
R1619	1-216-809-11	RES-CHIP	100	5%	1/10W
R1620	1-216-809-11	RES-CHIP	100	5%	1/10W
R1621	1-216-853-11	RES-CHIP	470K	5%	1/10W
R1622	1-216-853-11	RES-CHIP	470K	5%	1/10W
R1623	1-216-853-11	RES-CHIP	470K	5%	1/10W
R1624	1-216-853-11	RES-CHIP	470K	5%	1/10W
R1625	1-218-676-11	METAL CHIP	220	0.50%	1/16W
R1626	1-218-676-11	METAL CHIP	220	0.50%	1/16W
R1627	1-218-676-11	METAL CHIP	220	0.50%	1/16W
R1628	1-216-853-11	RES-CHIP	470K	5%	1/10W
R1629	1-216-853-11	RES-CHIP	470K	5%	1/10W
R1630	1-218-676-11	METAL CHIP	220	0.50%	1/16W
R1631	1-218-676-11	METAL CHIP	220	0.50%	1/16W
R1632	1-218-676-11	METAL CHIP	220	0.50%	1/16W
R1635	1-216-821-11	RES-CHIP	1K	5%	1/10W
R1636	1-216-821-11	RES-CHIP	1K	5%	1/10W
R1637	1-216-821-11	RES-CHIP	1K	5%	1/10W
R1645	1-216-809-11	RES-CHIP	100	5%	1/10W
R1646	1-216-864-11	SHORT CHIP	0		
R1647	1-216-864-11	SHORT CHIP	0		
R1648	1-216-864-11	SHORT CHIP	0		
R1649	1-218-676-11	METAL CHIP	220	0.50%	1/16W
R1650	1-218-676-11	METAL CHIP	220	0.50%	1/16W
R1651	1-218-676-11	METAL CHIP	220	0.50%	1/16W
R1652	1-218-676-11	METAL CHIP	220	0.50%	1/16W
R1653	1-218-676-11	METAL CHIP	220	0.50%	1/16W
R1654	1-218-676-11	METAL CHIP	220	0.50%	1/16W
R1655	1-218-676-11	METAL CHIP	220	0.50%	1/16W
R1656	1-218-676-11	METAL CHIP	220	0.50%	1/16W
R1657	1-218-676-11	METAL CHIP	220	0.50%	1/16W
R1658	1-218-676-11	METAL CHIP	220	0.50%	1/16W
R1659	1-218-676-11	METAL CHIP	220	0.50%	1/16W
R1660	1-218-676-11	METAL CHIP	220	0.50%	1/16W

VARISTOR

VD1516	1-803-974-21	VARISTOR, CHIP

UD

The UD board is not field repairable. If service is required, use the following part number to order a complete replacement board. Data is provided for reference only.

*	**A-1300-324-A**	**UD BOARD, COMPLETE**

CAPACITOR

C7001	1-126-395-11	ELECT CHIP	22μF	20%	16V
C7002	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C7004	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C7005	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C7006	1-124-779-00	ELECT CHIP	10μF	20%	16V
C7007	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C7008	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C7010	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C7011	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C7012	1-124-779-00	ELECT CHIP	10μF	20%	16V
C7013	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C7014	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C7015	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C7016	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C7017	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C7018	1-162-923-11	CERAMIC CHIP	47pF	5%	50V
C7019	1-162-923-11	CERAMIC CHIP	47pF	5%	50V
C7020	1-162-923-11	CERAMIC CHIP	47pF	5%	50V
C7021	1-124-779-00	ELECT CHIP	10μF	20%	16V
C7022	1-115-416-11	CERAMIC CHIP	0.001μF	5%	25V

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C7023	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C7024	1-124-779-00	ELECT CHIP	10μF	20%	16V
C7025	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C7026	1-124-779-00	ELECT CHIP	10μF	20%	16V
C7027	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C7028	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C7029	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C7030	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C7031	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C7032	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C7033	1-124-779-00	ELECT CHIP	10μF	20%	16V
C7034	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C7035	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C7036	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C7037	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C7038	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C7039	1-126-395-11	ELECT CHIP	22μF	20%	16V
C7040	1-162-921-11	CERAMIC CHIP	33pF	5%	50V
C7041	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C7042	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C7043	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C7044	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C7045	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C7046	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C7047	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C7048	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C7049	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C7050	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C7051	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C7052	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C7053	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C7056	1-126-395-11	ELECT CHIP	22μF	20%	16V
C7057	1-162-921-11	CERAMIC CHIP	33pF	5%	50V
C7058	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C7059	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C7060	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C7061	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C7062	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C7064	1-126-395-11	ELECT CHIP	22μF	20%	16V
C7065	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C7066	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C7067	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C7068	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C7069	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V

	REF. NO.	PART NO.	DESCRIPTION	VALUES	
	C7070	1-164-156-11	CERAMIC CHIP	0.1μF	25V
	C7071	1-164-156-11	CERAMIC CHIP	0.1μF	25V
	C7078	1-164-156-11	CERAMIC CHIP	0.1μF	25V
	C7079	1-164-156-11	CERAMIC CHIP	0.1μF	25V
	C7080	1-164-156-11	CERAMIC CHIP	0.1μF	25V
		CONNECTOR			
*	CN7001	1-816-228-21	CONNECTOR, DIV		
*	CN7002	1-564-526-11	PLUG,CONNECTOR	11P	
*	CN7004	1-564-519-11	PLUG,CONNECTOR	4P	
		DIODE			
	D7001	8-719-914-43	DIODE DAN202K-T-146		
	D7002	8-719-069-55	DIODE UDZSTE-175.6B		
	D7003	8-719-069-55	DIODE UDZSTE-175.6B		
	D7004	8-719-069-55	DIODE UDZSTE-175.6B		
	D7006	8-719-069-55	DIODE UDZSTE-175.6B		
		FERRITE BEAD			
	FB7001	1-414-760-21	FERRITE	0μH	
	FB7002	1-414-760-21	FERRITE	0μH	
	FB7003	1-414-760-21	FERRITE	0μH	
	FB7004	1-414-760-21	FERRITE	0μH	
		FILTER			
	FL7001	1-400-087-21	FILTER, EMI REMOVAL	(SMD)	
	FL7002	1-234-560-21	FILTER, LOW PASS		
	FL7003	1-234-559-21	FILTER, LOW PASS		
	FL7004	1-234-559-21	FILTER, LOW PASS		
		IC			
	IC7001	8-759-640-39	IC BR24C02F-WE2		
	IC7002	8-749-015-18	IC PQ07VZ012ZP		
	IC7003	8-749-015-18	IC PQ07VZ012ZP		
	IC7004	6-702-080-01	IC GM7030-H		
	IC7005	6-801-520-01	IC ST72631K4M1		
	IC7006	8-759-641-86	IC BR24C16F-E2		
	IC7007	6-702-170-01	IC PACDN006S		
	IC7008	6-702-170-01	IC PACDN006S		
	IC7009	6-702-170-01	IC PACDN006S		
		COIL			
	L7001	1-412-058-11	INDUCTOR	10μH	
	L7002	1-412-058-11	INDUCTOR	10μH	

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

RESISTOR

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R7003	1-216-821-11	RES-CHIP	1K	5%	1/10W
R7004	1-218-852-11	RES-CHIP	1.6K	5%	1/10W
R7007	1-216-821-11	RES-CHIP	1K	5%	1/10W
R7012	1-216-821-11	RES-CHIP	1K	5%	1/10W
R7013	1-216-821-11	RES-CHIP	1K	5%	1/10W
R7014	1-216-821-11	RES-CHIP	1K	5%	1/10W
R7015	1-216-833-11	RES-CHIP	10K	5%	1/10W
R7016	1-216-833-11	RES-CHIP	10K	5%	1/10W
R7020	1-216-833-11	RES-CHIP	10K	5%	1/10W
R7021	1-216-833-11	RES-CHIP	10K	5%	1/10W
R7023	1-216-833-11	RES-CHIP	10K	5%	1/10W
R7024	1-216-833-11	RES-CHIP	10K	5%	1/10W
R7025	1-216-833-11	RES-CHIP	10K	5%	1/10W
R7026	1-216-833-11	RES-CHIP	10K	5%	1/10W
R7029	1-218-692-11	METAL CHIP	1K	0.50%	1/16W
R7030	1-216-864-11	SHORT CHIP	0		
R7032	1-218-676-11	METAL CHIP	220	0.50%	1/16W
R7034	1-218-676-11	METAL CHIP	220	0.50%	1/16W
R7036	1-218-704-11	METAL CHIP	3.3K	0.50%	1/16W
R7037	1-218-676-11	METAL CHIP	220	0.50%	1/16W
R7041	1-216-833-11	RES-CHIP	10K	5%	1/10W
R7043	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R7044	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R7045	1-216-833-11	RES-CHIP	10K	5%	1/10W
R7047	1-216-833-11	RES-CHIP	10K	5%	1/10W
R7051	1-216-864-11	SHORT CHIP	0		
R7053	1-216-833-11	RES-CHIP	10K	5%	1/10W
R7054	1-216-833-11	RES-CHIP	10K	5%	1/10W
R7056	1-216-833-11	RES-CHIP	10K	5%	1/10W
R7057	1-216-864-11	SHORT CHIP	0		
R7058	1-216-833-11	RES-CHIP	10K	5%	1/10W
R7059	1-216-864-11	SHORT CHIP	0		
R7060	1-216-833-11	RES-CHIP	10K	5%	1/10W
R7061	1-216-833-11	RES-CHIP	10K	5%	1/10W
R7062	1-216-864-11	SHORT CHIP	0		
R7065	1-216-833-11	RES-CHIP	10K	5%	1/10W
R7066	1-218-694-11	METAL CHIP	1.2K	0.50%	1/16W
R7067	1-216-833-11	RES-CHIP	10K	5%	1/10W
R7068	1-216-801-11	RES-CHIP	22	5%	1/10W
R7069	1-216-801-11	RES-CHIP	22	5%	1/10W
R7071	1-216-803-11	RES-CHIP	33	5%	1/10W
R7072	1-216-803-11	RES-CHIP	33	5%	1/10W
R7075	1-218-676-11	METAL CHIP	220	0.50%	1/16W
R7080	1-218-704-11	METAL CHIP	3.3K	0.50%	1/16W
R7087	1-218-680-11	METAL CHIP	330	0.50%	1/16W
R7096	1-216-833-11	RES-CHIP	10K	5%	1/10W
R7097	1-216-809-11	RES-CHIP	100	5%	1/10W
R7098	1-216-809-11	RES-CHIP	100	5%	1/10W
R7099	1-216-809-11	RES-CHIP	100	5%	1/10W
R7101	1-216-864-11	SHORT CHIP	0		
R7106	1-216-833-11	RES-CHIP	10K	5%	1/10W
R7108	1-216-805-11	RES-CHIP	47	5%	1/10W
R7109	1-216-805-11	RES-CHIP	47	5%	1/10W
R7111	1-216-864-11	SHORT CHIP	0		
R7112	1-216-864-11	SHORT CHIP	0		
R7113	1-216-864-11	SHORT CHIP	0		
R7114	1-218-700-11	METAL CHIP	2.2K	0.50%	1/16W
R7115	1-218-700-11	METAL CHIP	2.2K	0.50%	1/16W
R7116	1-218-700-11	METAL CHIP	2.2K	0.50%	1/16W
R7117	1-218-668-11	METAL CHIP	100	0.50%	1/16W
R7119	1-218-668-11	METAL CHIP	100	0.50%	1/16W
R7121	1-216-864-11	SHORT CHIP	0		
R7123	1-218-704-11	METAL CHIP	3.3K	0.50%	1/16W
R7124	1-218-680-11	METAL CHIP	330	0.50%	1/16W
R7125	1-218-700-11	METAL CHIP	2.2K	0.50%	1/16W
R7126	1-216-864-11	SHORT CHIP	0		

CRYSTAL

REF. NO.	PART NO.	DESCRIPTION
X7001	1-795-568-21	VIBRATOR, CRYSTAL
X7002	1-795-567-21	VIBRATOR, CRYSTAL

A

REF. NO.	PART NO.	DESCRIPTION
*	**A-1300-406-A**	**A BOARD, COMPLETE**
*	4-374-846-11	COVER,CAPACITOR, CAP TYPE
	4-382-854-01	SCREW (M3X8), P, SW (+)

CAPACITOR

REF. NO.	PART NO.	DESCRIPTION	VALUES		
⚠ C503	1-136-311-11	MYLAR	0.47µF	20%	125V
⚠ C505	1-117-700-41	CERAMIC	0.0022µF	20%	250V
C506	1-126-971-11	ELECT	470µF	20%	50V
C507	1-126-943-11	ELECT	2200µF	20%	25V
⚠ C508	1-117-700-41	CERAMIC	0.0022µF	20%	250V
C510	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C511	1-126-967-11	ELECT	47µF	20%	50V
C513	1-126-961-11	ELECT	2.2µF	20%	50V

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C515	1-126-947-11	ELECT	47μF	20%	25V
C516	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C517	1-104-665-11	ELECT	100μF	20%	25V
C518	1-126-967-11	ELECT	47μF	20%	50V
C519	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C520	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C521	1-104-665-11	ELECT	100μF	20%	25V
C522	1-126-964-11	ELECT	10μF	20%	50V
C523	1-104-665-11	ELECT	100μF	20%	25V
C524	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C525	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C526	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C527	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C528	1-126-933-11	ELECT	100μF	20%	16V
C529	1-126-941-11	ELECT	470μF	20%	25V
C530	1-126-941-11	ELECT	470μF	20%	25V
C535	1-115-156-11	CERAMIC CHIP	1μF		10V
C536	1-126-933-11	ELECT	100μF	20%	16V
C538	1-165-176-11	CERAMIC CHIP	0.047μF	10%	16V
C540	1-126-767-11	ELECT	1000μF	20%	16V
C541	1-162-961-11	CERAMIC CHIP	330pF	10%	50V
C542	1-126-941-11	ELECT	470μF	20%	25V
C547	1-126-767-11	ELECT	1000μF	20%	16V
C548	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C549	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C550	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C551	1-126-933-11	ELECT	100μF	20%	16V
C553	1-126-767-11	ELECT	1000μF	20%	16V
C554	1-126-933-11	ELECT	100μF	20%	16V
C555	1-126-933-11	ELECT	100μF	20%	16V
C556	1-126-767-11	ELECT	1000μF	20%	16V
C558	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C559	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C560	1-126-935-11	ELECT	470μF	20%	16V
C561	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C562	1-126-964-11	ELECT	10μF	20%	50V
C563	1-126-947-11	ELECT	47μF	20%	25V
C564	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C565	1-115-156-11	CERAMIC CHIP	1μF		10V
C566	1-162-961-11	CERAMIC CHIP	330pF	10%	50V
C567	1-165-176-11	CERAMIC CHIP	0.047μF	10%	16V
C569	1-126-767-11	ELECT	1000μF	20%	16V
C572	1-104-665-11	ELECT	100μF	20%	25V
C574	1-126-960-11	ELECT	1μF	20%	50V

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	C577	1-126-960-11	ELECT	1μF	20%	50V
	C578	1-126-964-11	ELECT	10μF	20%	50V
	C579	1-126-964-11	ELECT	10μF	20%	50V
	C580	1-126-964-11	ELECT	10μF	20%	50V
	C583	1-126-960-11	ELECT	1μF	20%	50V
	C584	1-126-960-11	ELECT	1μF	20%	50V
	C585	1-126-960-11	ELECT	1μF	20%	50V
	C591	1-126-969-11	ELECT	220μF	20%	50V
	C593	1-126-969-11	ELECT	220μF	20%	50V
	C595	1-126-969-11	ELECT	220μF	20%	50V
	C597	1-162-964-11	CERAMIC CHIP	0.001μF	10%	50V
	C598	1-130-495-00	MYLAR	0.1μF	5%	50V
	C599	1-126-974-11	ELECT	3300μF	20%	50V
	C601	1-164-156-11	CERAMIC CHIP	0.1μF		25V
	C607	1-130-495-00	MYLAR	0.1μF	5%	50V
	C611	1-130-495-00	MYLAR	0.1μF	5%	50V
	C612	1-128-550-11	ELECT	2200μF	20%	50V
	C613	1-128-550-11	ELECT	2200μF	20%	50V
	C901	1-126-939-11	ELECT	10000μF	20%	16V
	C902	1-126-947-11	ELECT	47μF	20%	25V
		CONNECTOR				
	CN501	1-695-915-11	TAB (CONTACT)			
	CN502	1-695-915-11	TAB (CONTACT)			
	CN503	1-580-843-11	PIN,CONNECTOR (POWER)			
	CN507	1-764-812-11	CONNECTOR, BOARD TO BOARD			11P
*	CN508	1-779-892-11	CONNECTOR, BOARD TO BOARD			10P
*	CN509	1-779-892-11	CONNECTOR, BOARD TO BOARD			10P
	CN510	1-793-494-11	CONNECTOR, BOARD TO BOARD			40P
*	CN511	1-564-509-11	PLUG,CONNECTOR			6P
*	CN514	1-766-240-11	PIN,CONNECTOR (PC BOARD)			2P
	CN515	1-695-915-11	TAB (CONTACT)			
	CN516	1-695-915-11	TAB (CONTACT)			
	CN517	1-695-915-11	TAB (CONTACT)			
	CN518	1-695-915-11	TAB (CONTACT)			
	CN519	1-695-915-11	TAB (CONTACT)			
	CN520	1-695-915-11	TAB (CONTACT)			
*	CN521	1-564-511-11	PLUG,CONNECTOR	8P		
*	CN524	1-564-515-11	PLUG,CONNECTOR	12P		
*	CN526	1-564-508-11	PLUG,CONNECTOR	5P		
*	CN527	1-564-511-61	PLUG,CONNECTOR	8P		
*	CN528	1-564-507-11	PLUG,CONNECTOR	4P		
*	CN900	1-564-508-11	PLUG,CONNECTOR	5P		
*	CN901	1-564-507-11	PLUG,CONNECTOR	4P		

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REF. NO.	PART NO.	DESCRIPTION	VALUES
	DIODE		
D503	8-719-511-40	DIODE S1VB20	
D504	8-719-991-33	DIODE 1SS133T-77	
D505	8-719-991-33	DIODE 1SS133T-77	
D508	8-719-991-33	DIODE 1SS133T-77	
D509	8-719-991-33	DIODE 1SS133T-77	
D510	8-719-991-33	DIODE 1SS133T-77	
D511	8-719-991-33	DIODE 1SS133T-77	
D515	8-719-991-33	DIODE 1SS133T-77	
D516	8-719-991-33	DIODE 1SS133T-77	
D517	8-719-991-33	DIODE 1SS133T-77	
D519	8-719-991-33	DIODE 1SS133T-77	
D520	8-719-991-33	DIODE 1SS133T-77	
D521	8-719-991-33	DIODE 1SS133T-77	
D522	8-719-991-33	DIODE 1SS133T-77	
D524	8-719-991-33	DIODE 1SS133T-77	
D526	8-719-991-33	DIODE 1SS133T-77	
D528	8-719-109-85	DIODE MTZJ-T-77-5.1B	
D529	8-719-991-33	DIODE 1SS133T-77	
D530	8-719-924-13	DIODE MTZJ-T-77-22B	
D531	8-719-924-13	DIODE MTZJ-T-77-22B	
D534	8-719-991-33	DIODE 1SS133T-77	
D535	8-719-991-33	DIODE 1SS133T-77	
D540	8-719-991-33	DIODE 1SS133T-77	
D541	8-719-991-33	DIODE 1SS133T-77	
D542	8-719-991-33	DIODE 1SS133T-77	
D543	8-719-991-33	DIODE 1SS133T-77	
D544	8-719-991-33	DIODE 1SS133T-77	
D545	8-719-991-33	DIODE 1SS133T-77	
D546	8-719-991-33	DIODE 1SS133T-77	
D901	8-719-063-70	DIODE D1NL20U-TA2	
	FUSE		
⚠ F501	1-532-506-51	FUSE	6.3A/250V
	FUSE HOLDER		
FH501	1-533-223-11	HOLDER, FUSE	
FH502	1-533-223-11	HOLDER, FUSE	
	IC		
IC501	8-759-450-47	IC BA05T	
IC502	8-759-520-49	IC PQ30RV21	
IC504	6-700-898-01	IC PQ05RD21	
IC505	8-759-653-07	IC PQ09RD21	

REF. NO.	PART NO.	DESCRIPTION	VALUES
IC508	6-702-490-01	IC TA8258H	
IC901	8-759-450-47	IC BA05T	
	CHIP CONDUCTOR		
JR501	1-216-864-11	SHORT CHIP	0
JR502	1-216-864-11	SHORT CHIP	0
JR503	1-216-864-11	SHORT CHIP	0
JR504	1-216-864-11	SHORT CHIP	0
JR505	1-216-864-11	SHORT CHIP	0
JR506	1-216-864-11	SHORT CHIP	0
JR509	1-216-864-11	SHORT CHIP	0
JR510	1-216-864-11	SHORT CHIP	0
JR512	1-216-864-11	SHORT CHIP	0
JR513	1-216-864-11	SHORT CHIP	0
JR514	1-216-864-11	SHORT CHIP	0
JR515	1-216-864-11	SHORT CHIP	0
JR516	1-216-864-11	SHORT CHIP	0
	COIL		
L501	1-469-320-21	INDUCTOR	100µH
L502	1-412-525-31	INDUCTOR	10µH
L503	1-469-320-21	INDUCTOR	100µH
L504	1-469-317-21	INDUCTOR	10µH
L505	1-469-320-21	INDUCTOR	100µH
L506	1-469-320-21	INDUCTOR	100µH
L507	1-469-317-21	INDUCTOR	10µH
L508	1-412-529-11	INDUCTOR	22µH
⚠ L510	1-437-479-11	TRANSFORMER, LINE FILTER	
⚠ L511	1-437-479-11	TRANSFORMER, LINE FILTER	
	IC LINK		
⚠ PS502	1-532-984-11	LINK, IC 2A/90V	
	TRANSISTOR		
Q503	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q504	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q505	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q506	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q507	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q509	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q510	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q511	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q512	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q513	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	

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	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	Q514	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
	Q517	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q518	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q519	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q520	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
	Q521	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
	Q524	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q527	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
	Q528	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
		RESISTOR				
	R501	1-216-864-11	SHORT CHIP	0		
⚠	R508	1-219-776-11	CARBON	2.2M	10%	1/2W
⚠	R509	1-244-270-11	CEMENTED	0.47	5%	20W
⚠	R510	1-244-270-11	CEMENTED	0.47	5%	20W
	R511	1-216-849-11	RES-CHIP	220K	5%	1/10W
	R512	1-216-849-11	RES-CHIP	220K	5%	1/10W
	R513	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R515	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R516	1-216-857-11	RES-CHIP	1M	5%	1/10W
	R517	1-216-805-11	RES-CHIP	47	5%	1/10W
	R518	1-216-805-11	RES-CHIP	47	5%	1/10W
	R519	1-216-839-11	RES-CHIP	33K	5%	1/10W
	R520	1-216-837-11	RES-CHIP	22K	5%	1/10W
	R521	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
	R522	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
	R523	1-216-837-11	RES-CHIP	22K	5%	1/10W
	R524	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R525	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R526	1-216-837-11	RES-CHIP	22K	5%	1/10W
	R527	1-216-343-00	METAL OXIDE	0.33	5%	1W
	R528	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R529	1-216-857-11	RES-CHIP	1M	5%	1/10W
	R530	1-216-847-11	RES-CHIP	150K	5%	1/10W
	R531	1-216-821-11	RES-CHIP	1K	5%	1/10W
	R532	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
	R533	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R534	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
	R535	1-218-722-11	METAL CHIP	18K	0.50%	1/16W
	R537	1-218-750-11	METAL CHIP	270K	0.50%	1/16W
	R538	1-216-823-11	RES-CHIP	1.5K	5%	1/10W
	R540	1-216-821-11	RES-CHIP	1K	5%	1/10W
	R541	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R542	1-216-821-11	RES-CHIP	1K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R543	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R544	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R545	1-216-805-11	RES-CHIP	47	5%	1/10W
R546	1-216-805-11	RES-CHIP	47	5%	1/10W
R547	1-216-827-11	RES-CHIP	3.3K	5%	1/10W
R548	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R550	1-216-845-11	RES-CHIP	100K	5%	1/10W
R551	1-216-833-11	RES-CHIP	10K	5%	1/10W
R552	1-216-837-11	RES-CHIP	22K	5%	1/10W
R553	1-216-821-11	RES-CHIP	1K	5%	1/10W
R554	1-216-864-11	SHORT CHIP	0		
R555	1-216-833-11	RES-CHIP	10K	5%	1/10W
R556	1-216-839-11	RES-CHIP	33K	5%	1/10W
R557	1-216-821-11	RES-CHIP	1K	5%	1/10W
R558	1-216-857-11	RES-CHIP	1M	5%	1/10W
R559	1-216-847-11	RES-CHIP	150K	5%	1/10W
R560	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R561	1-216-833-11	RES-CHIP	10K	5%	1/10W
R562	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R563	1-216-823-11	RES-CHIP	1.5K	5%	1/10W
R564	1-216-847-11	RES-CHIP	150K	5%	1/10W
R565	1-216-821-11	RES-CHIP	1K	5%	1/10W
R570	1-216-833-11	RES-CHIP	10K	5%	1/10W
R571	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R572	1-216-809-11	RES-CHIP	100	5%	1/10W
R573	1-216-847-11	RES-CHIP	150K	5%	1/10W
R574	1-216-809-11	RES-CHIP	100	5%	1/10W
R577	1-216-821-11	RES-CHIP	1K	5%	1/10W
R579	1-216-821-11	RES-CHIP	1K	5%	1/10W
R581	1-216-864-11	SHORT CHIP	0		
R582	1-216-864-11	SHORT CHIP	0		
R585	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R586	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R588	1-216-833-11	RES-CHIP	10K	5%	1/10W
R589	1-216-833-11	RES-CHIP	10K	5%	1/10W
R591	1-216-821-11	RES-CHIP	1K	5%	1/10W
R593	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R595	1-216-821-11	RES-CHIP	1K	5%	1/10W
R596	1-216-833-11	RES-CHIP	10K	5%	1/10W
R598	1-216-833-11	RES-CHIP	10K	5%	1/10W
R599	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R601	1-216-821-11	RES-CHIP	1K	5%	1/10W
R602	1-216-833-11	RES-CHIP	10K	5%	1/10W
R603	1-216-829-11	RES-CHIP	4.7K	5%	1/10W

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	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	R605	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
	R606	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R607	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R610	1-216-821-11	RES-CHIP	1K	5%	1/10W
	R611	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R617	1-249-385-11	CARBON	2.2	5%	1/4W
	R622	1-249-385-11	CARBON	2.2	5%	1/4W
	R631	1-249-429-11	CARBON	10K	5%	1/4W
	R632	1-249-429-11	CARBON	10K	5%	1/4W
	R634	1-216-837-11	RES-CHIP	22K	5%	1/10W
	R635	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R636	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R643	1-216-864-11	SHORT CHIP	0		
	R645	1-216-864-11	SHORT CHIP	0		
	R647	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R904	1-216-393-00	METAL OXIDE	2.2	5%	3W

TRANSFORMER

	REF. NO.	PART NO.	DESCRIPTION
⚠	T502	1-437-697-11	TRANSFORMER, STANDBY

TUNER

REF. NO.	PART NO.	DESCRIPTION
TU501	8-598-594-30	TUNER, FSS BTF-FA421
TU502	8-598-593-50	TUNER, FSS BTF-WA421

VARISTOR

	REF. NO.	PART NO.	DESCRIPTION
⚠	VD501	1-801-074-11	VARISTOR ERZV10D271

B

The B board is not field repairable. If service is required, use the following part number to order a complete replacement board. Data is provided for reference only.

	PART NO.	DESCRIPTION
*	**A-1300-407-A**	**B BOARD, COMPLETE**
	4-034-937-01	SCREW (M3), TAPPING
*	4-088-898-01	CARTON
*	7-322-065-48	RUBBER, SILICONE RTV (KE-3490)

CAPACITOR

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C2801	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2802	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2804	1-162-923-11	CERAMIC CHIP	47pF	5%	50V
C2805	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C2806	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C2807	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C2808	1-126-601-11	ELECT CHIP	2.2µF	20%	50V
C2809	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2810	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C2811	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2812	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C2813	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C2814	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C2815	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C2816	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C2817	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C2818	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C2819	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C2820	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C2821	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C2822	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C2823	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2824	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2825	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C2826	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2827	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2828	1-110-563-11	CERAMIC CHIP	0.068µF	10%	16V
C2829	1-162-968-11	CERAMIC CHIP	0.0047µF	10%	50V
C2830	1-128-996-11	ELECT CHIP	4.7µF	20%	50V
C2831	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2833	1-127-715-91	CERAMIC CHIP	0.22µF	10%	16V
C2834	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C2835	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C2836	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2837	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2840	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C2841	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C2842	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2843	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2844	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2845	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2846	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C2847	1-127-715-91	CERAMIC CHIP	0.22µF	10%	16V
C2849	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C2850	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2851	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2859	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2860	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C2861	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C3004	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
C3005	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3006	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3008	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3009	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3011	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3012	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3013	1-128-391-11	ELECT CHIP	330μF	20%	6.3V
C3014	1-128-391-11	ELECT CHIP	330μF	20%	6.3V
C3015	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3016	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3017	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C3018	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3019	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3020	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3021	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3023	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C3024	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C3025	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3026	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3027	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3028	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3029	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3030	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3031	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3032	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3033	1-109-982-11	CERAMIC CHIP	1μF	10%	10V
C3034	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3035	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3036	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3037	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3038	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3039	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3040	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3041	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3042	1-128-391-11	ELECT CHIP	330μF	20%	6.3V
C3044	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3046	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3047	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3048	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3049	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3089	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3090	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3095	1-128-391-11	ELECT CHIP	330μF	20%	6.3V
C3096	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3097	1-128-359-11	ELECT CHIP	100μF	20%	10V
C3098	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3101	1-162-925-11	CERAMIC CHIP	68pF	5%	50V
C3102	1-162-925-11	CERAMIC CHIP	68pF	5%	50V
C3103	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3301	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3302	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3303	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
C3304	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3305	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3307	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3308	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3309	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
C3313	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3314	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3315	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3316	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3317	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3318	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3319	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3325	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3326	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3329	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3333	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3334	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3335	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3337	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3341	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3343	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3349	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3350	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3351	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3357	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3358	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3359	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3360	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3363	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3364	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3365	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3366	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3367	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3368	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3369	1-164-156-11	CERAMIC CHIP	0.1μF		25V

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C3370	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3371	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3372	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3374	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3375	1-127-760-11	CERAMIC CHIP	4.7μF	10%	6.3V
C3376	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3377	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3378	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3379	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3401	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3402	1-126-394-11	ELECT CHIP	10μF	20%	16V
C3403	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3404	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
C3405	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
C3406	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3407	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3408	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
C3409	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3410	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3411	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3412	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3413	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3414	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3417	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3418	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3424	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3426	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3428	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3431	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3435	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3436	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3439	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3440	1-162-916-11	CERAMIC CHIP	12pF	5%	50V
C3441	1-162-916-11	CERAMIC CHIP	12pF	5%	50V
C3442	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3444	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3446	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3449	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3450	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3452	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3460	1-162-923-11	CERAMIC CHIP	47pF	5%	50V
C3462	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3463	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3464	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3465	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3466	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3467	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3468	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
C3469	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3470	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
C3473	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3474	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3475	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3476	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3477	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3478	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3479	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3480	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3481	1-117-681-11	ELECT CHIP	100μF	20%	16V
C3482	1-117-681-11	ELECT CHIP	100μF	20%	16V
C3483	1-117-681-11	ELECT CHIP	100μF	20%	16V
C3484	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C3485	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3486	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3487	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3488	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3489	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3490	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3491	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3492	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3493	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3494	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3495	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3496	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3499	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3500	1-117-681-11	ELECT CHIP	100μF	20%	16V
C3501	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3601	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3602	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3604	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3605	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3606	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3607	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3608	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3610	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3611	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3613	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
C3614	1-164-156-11	CERAMIC CHIP	0.1μF		25V

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C3615	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3617	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3618	1-127-760-11	CERAMIC CHIP	4.7μF	10%	6.3V
C3619	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
C3620	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3622	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3623	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3624	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3626	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3627	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3628	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3629	1-126-394-11	ELECT CHIP	10μF	20%	16V
C3630	1-126-394-11	ELECT CHIP	10μF	20%	16V
C3906	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3912	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
C8601	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C8602	1-127-692-11	CERAMIC CHIP	10μF	10%	6.3V
C8603	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C8604	1-127-692-11	CERAMIC CHIP	10μF	10%	6.3V
C8605	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C8606	1-127-692-11	CERAMIC CHIP	10μF	10%	6.3V
C8607	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C8608	1-128-934-91	CERAMIC CHIP	0.33μF	20%	10V
C8609	1-162-967-11	CERAMIC CHIP	0.0033μF	10%	50V
C8610	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C8611	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C8612	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C8613	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C8615	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C8617	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C8621	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C8622	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C8623	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C8624	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C8625	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C8630	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C8631	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C8632	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C8633	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C8634	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C8635	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C8636	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C8637	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C8638	1-128-994-21	ELECT CHIP	47μF	20%	10V
C8639	1-126-204-11	ELECT CHIP	47μF	20%	16V
C8640	1-117-370-11	CERAMIC CHIP	10μF		10V
C8641	1-117-370-11	CERAMIC CHIP	10μF		10V
C8642	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C8643	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C8644	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C8645	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C8646	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C8647	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C8648	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C8649	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C8650	1-126-204-11	ELECT CHIP	47μF	20%	16V
C8651	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C8652	1-128-994-21	ELECT CHIP	47μF	20%	10V
C8653	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C8654	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
C8655	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C8656	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C8657	1-164-156-11	CERAMIC CHIP	0.1μF		25V

CONNECTOR

*	CN2801	1-564-506-11	PLUG,CONNECTOR	3P
*	CN2802	1-564-506-11	PLUG,CONNECTOR	3P
*	CN2803	1-564-508-11	PLUG,CONNECTOR	5P
	CN2805	1-764-334-11	PLUG,CONNECTOR	11P
*	CN2806	1-564-510-11	PLUG,CONNECTOR	7P
*	CN3602	1-793-141-21	PIN,CONNECTOR (PC BOARD)	15P
*	CN3603	1-815-177-12	PIN,CONNECTOR (WITH SHIELD)	22P

DIODE

D2803	8-719-404-50	DIODE MA111-TX
D2806	8-719-069-55	DIODE UDZSTE-175.6B
D2807	8-719-404-50	DIODE MA111-TX
D3001	8-719-404-50	DIODE MA111-TX
D3002	8-719-083-58	DIODE UDZSTE-173.9B
D3089	8-719-800-76	DIODE MA153-TX
D3090	8-719-800-76	DIODE MA153-TX
D3309	8-719-914-43	DIODE DAN202K-T-146
D3310	8-719-914-44	DIODE DAP202K-T-146
D3401	8-719-914-43	DIODE DAN202K-T-146
D3402	8-719-914-44	DIODE DAP202K-T-146
D3403	8-719-978-33	DIODE UDZSTE-176.8B

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	D3404	8-719-404-50	DIODE MA111-TX			
	D3601	8-719-800-76	DIODE MA153-TX			
	D3603	8-719-083-58	DIODE UDZSTE-173.9B			

FERRITE BEAD

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	FB3001	1-500-451-11	FERRITE	0μH		
	FB3002	1-216-864-11	SHORT CHIP	0		
	FB3301	1-414-235-22	FERRITE	0μH		
	FB3302	1-414-235-22	FERRITE	0μH		
	FB3303	1-216-809-11	RES-CHIP	100	5%	1/10W
	FB3304	1-469-110-21	FERRITE	0μH		
	FB3401	1-414-235-22	FERRITE	0μH		
	FB3402	1-414-235-22	FERRITE	0μH		
	FB3403	1-216-864-11	SHORT CHIP	0		
	FB3601	1-414-228-11	FERRITE	0μH		
	FB3602	1-414-228-11	FERRITE	0μH		
	FB3603	1-216-864-11	SHORT CHIP	0		
	FB3604	1-216-864-11	SHORT CHIP	0		
	FB3605	1-216-864-11	SHORT CHIP	0		
	FB3606	1-216-864-11	SHORT CHIP	0		
	FB3607	1-216-864-11	SHORT CHIP	0		
	FB3608	1-469-568-21	FERRITE	0μH		
	FB3609	1-414-921-11	FERRITE	0μH		
	FB3610	1-414-921-11	FERRITE	0μH		
	FB3611	1-414-921-11	FERRITE	0μH		
	FB3612	1-414-921-11	FERRITE	0μH		

FILTER

	REF. NO.	PART NO.	DESCRIPTION	VALUES
	FL3001	1-234-177-21	FERRITE	0μH
	FL3002	1-234-177-21	FERRITE	0μH
	FL3301	1-234-558-21	FILTER, LOW PASS	
	FL3302	1-234-557-21	FILTER, LOW PASS	
	FL3303	1-234-557-21	FILTER, LOW PASS	
	FL3401	1-781-923-21	FILTER, LOW PASS (SMD)	
	FL3602	1-234-494-21	FILTER, EMI REMOVAL (SMD)	
	FL8601	1-234-559-21	FILTER, LOW PASS	
	FL8602	1-234-559-21	FILTER, LOW PASS	
	FL8603	1-234-560-21	FILTER, LOW PASS	

IC

	REF. NO.	PART NO.	DESCRIPTION	VALUES
⚠	IC2801	8-752-102-68	IC CXA2170Q	
	IC3001	6-700-188-01	IC IS41C16256-35K	
	IC3002	8-759-583-47	IC UPC2933T-E1	
	IC3003	6-701-892-01	IC TC90A90F(BH,DRY)	
	IC3004	8-759-642-22	IC UPC29M05T-E2	
	IC3089	8-759-682-41	IC M24C32-WMN6T(A)	
	IC3090	6-801-376-01	IC MB94918RpF-G-147-BND	
	IC3091	8-759-352-91	IC PST9143NL	
	IC3301	8-759-663-74	IC HY57V161610DTC-7TR	
	IC3302	6-700-398-01	IC UPC2918T-E1	
	IC3303	8-752-410-57	IC CXD2097AQ	
	IC3306	8-759-669-78	IC TLC2933IPWR-12	
	IC3401	6-700-399-01	IC UPC2925T-E1	
	IC3402	8-759-677-37	IC MT48LC2M32B2TG-7	
	IC3403	8-759-460-29	IC PST9120NL	
	IC3408	8-759-672-57	IC CXD9509AQ	
	IC3409	8-759-833-72	IC NJM2870F25-TE2	
	IC3410	8-752-409-20	IC CXD2309AQ	
	IC3411	8-759-082-57	IC TC7W04FU(TE12R)	
	IC3413	6-700-205-01	IC TC74LVX157FT(EL)	
	IC3414	8-759-548-56	IC M52055FP	
	IC3601	8-759-592-50	IC TC7SZ126FU(TE85R)	
	IC3602	8-759-592-49	IC TC7SZ125FU(TE85R)	
	IC3603	8-759-639-85	IC SN65LVDS31DR	
	IC3604	6-701-762-11	IC DS90LV028ATMX	
	IC3605	8-759-698-08	IC SN74CBTLV1G125DCKR	
	IC3606	8-759-641-26	IC NJM2391DL1-33(TE1)	
	IC3608	8-759-669-75	IC TLC2932IPWR	
	IC3609	8-759-828-44	IC NJM2870F33(TE2)	
	IC8601	8-752-093-03	IC CXA3506R	

CHIP CONDUCTOR

REF. NO.	PART NO.	DESCRIPTION	VALUES
JR3001	1-216-864-11	SHORT CHIP	0

COIL

REF. NO.	PART NO.	DESCRIPTION	VALUES
L2801	1-469-555-21	INDUCTOR	10μH
L2803	1-469-555-21	INDUCTOR	10μH
L2804	1-469-555-21	INDUCTOR	10μH
L2805	1-469-555-21	INDUCTOR	10μH
L2806	1-469-555-21	INDUCTOR	10μH
L2807	1-469-555-21	INDUCTOR	10μH
L2808	1-469-555-21	INDUCTOR	10μH
L2811	1-469-555-21	INDUCTOR	10μH
L3001	1-216-295-91	SHORT CHIP	0
L3002	1-412-026-11	INDUCTOR	1μH
L3004	1-412-026-11	INDUCTOR	1μH
L3005	1-412-026-11	INDUCTOR	1μH
L3007	1-469-555-21	INDUCTOR	10μH
L3009	1-469-555-21	INDUCTOR	10μH
L3010	1-469-555-21	INDUCTOR	10μH

REF. NO.	PART NO.	DESCRIPTION	VALUES
L3011	1-469-555-21	INDUCTOR	10μH
L3089	1-414-233-22	FERRITE	0μH
L3102	1-469-552-21	INDUCTOR	3.3μH
L3304	1-469-555-21	INDUCTOR	10μH
L3310	1-469-561-21	INDUCTOR	100μH
L3311	1-469-561-21	INDUCTOR	100μH
L3402	1-412-052-21	INDUCTOR	1μH
L3405	1-469-555-21	INDUCTOR	10μH
L3406	1-469-555-21	INDUCTOR	10μH
L3407	1-469-555-21	INDUCTOR	10μH
L3411	1-412-058-11	INDUCTOR	10μH
L3412	1-469-555-21	INDUCTOR	10μH
L3413	1-469-555-21	INDUCTOR	10μH
L3414	1-469-555-21	INDUCTOR	10μH
L3416	1-469-555-21	INDUCTOR	10μH
L3418	1-469-555-21	INDUCTOR	10μH
L3601	1-419-370-21	INDUCTOR	0μH
L3602	1-419-370-21	INDUCTOR	0μH
L3603	1-419-370-21	INDUCTOR	0μH
L3604	1-419-370-21	INDUCTOR	0μH
L3605	1-419-370-21	INDUCTOR	0μH
L3903	1-412-052-21	INDUCTOR	1μH
L8601	1-469-555-21	INDUCTOR	10μH
L8602	1-469-553-21	INDUCTOR	4.7μH
L8603	1-469-555-21	INDUCTOR	10μH
L8604	1-469-555-21	INDUCTOR	10μH
	TRANSISTOR		
Q2801	8-729-122-63	TRANSISTOR 2SA1226-T1E4	
Q2802	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q2803	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q2804	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2805	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q2806	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2807	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2810	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q2811	8-729-122-63	TRANSISTOR 2SA1226-T1E4	
Q2812	8-729-122-63	TRANSISTOR 2SA1226-T1E4	
Q2813	8-729-122-63	TRANSISTOR 2SA1226-T1E4	
Q2814	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2815	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2816	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2817	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2822	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2823	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3003	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3005	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3006	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3007	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3008	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3009	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3089	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3090	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3092	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3093	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3302	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3303	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3305	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3306	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3307	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3308	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3309	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3310	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3311	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3401	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3402	8-729-028-28	TRANSISTOR 2SK2036(TE85L)	
Q3404	8-729-028-28	TRANSISTOR 2SK2036(TE85L)	
Q3410	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3411	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3412	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3413	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3414	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3415	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q3416	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3601	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q3906	8-729-028-28	TRANSISTOR 2SK2036(TE85L)	
Q3907	8-729-028-28	TRANSISTOR 2SK2036(TE85L)	
Q8601	8-729-102-07	TRANSISTOR 2SC2223-T1F13F14	
Q8602	8-729-102-07	TRANSISTOR 2SC2223-T1F13F14	
Q8603	8-729-102-07	TRANSISTOR 2SC2223-T1F13F14	
Q8604	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q8605	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q8606	8-729-122-63	TRANSISTOR 2SA1226-T1E4	
Q8607	8-729-122-63	TRANSISTOR 2SA1226-T1E4	
Q8608	8-729-122-63	TRANSISTOR 2SA1226-T1E4	
Q8609	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	

RESISTOR

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R2801	1-218-867-11	RES-CHIP	6.8K	5%	1/10W
R2803	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R2804	1-216-805-11	RES-CHIP	47	5%	1/10W
R2805	1-216-822-11	RES-CHIP	1.2K	5%	1/10W
R2806	1-216-863-11	RES-CHIP	3.3M	5%	1/10W
R2807	1-216-809-11	RES-CHIP	100	5%	1/10W
R2808	1-216-826-11	RES-CHIP	2.7K	5%	1/10W
R2809	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R2810	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R2811	1-216-809-11	RES-CHIP	100	5%	1/10W
R2812	1-218-708-11	METAL CHIP	4.7K	0.50%	1/16W
R2813	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R2814	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R2816	1-216-845-11	RES-CHIP	100K	5%	1/10W
R2817	1-216-809-11	RES-CHIP	100	5%	1/10W
R2818	1-216-809-11	RES-CHIP	100	5%	1/10W
R2819	1-216-809-11	RES-CHIP	100	5%	1/10W
R2820	1-216-809-11	RES-CHIP	100	5%	1/10W
R2821	1-216-809-11	RES-CHIP	100	5%	1/10W
R2823	1-216-841-11	RES-CHIP	47K	5%	1/10W
R2824	1-216-809-11	RES-CHIP	100	5%	1/10W
R2825	1-216-841-11	RES-CHIP	47K	5%	1/10W
R2826	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R2827	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R2828	1-216-832-11	RES-CHIP	8.2K	5%	1/10W
R2829	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2830	1-216-818-11	RES-CHIP	560	5%	1/10W
R2831	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2832	1-216-809-11	RES-CHIP	100	5%	1/10W
R2833	1-216-809-11	RES-CHIP	100	5%	1/10W
R2834	1-216-809-11	RES-CHIP	100	5%	1/10W
R2835	1-216-809-11	RES-CHIP	100	5%	1/10W
R2836	1-216-809-11	RES-CHIP	100	5%	1/10W
R2837	1-216-809-11	RES-CHIP	100	5%	1/10W
R2838	1-216-809-11	RES-CHIP	100	5%	1/10W
R2839	1-216-809-11	RES-CHIP	100	5%	1/10W
R2840	1-216-809-11	RES-CHIP	100	5%	1/10W
R2841	1-216-809-11	RES-CHIP	100	5%	1/10W
R2842	1-216-809-11	RES-CHIP	100	5%	1/10W
R2843	1-216-809-11	RES-CHIP	100	5%	1/10W
R2844	1-216-826-11	RES-CHIP	2.7K	5%	1/10W
R2845	1-216-809-11	RES-CHIP	100	5%	1/10W
R2846	1-216-827-11	RES-CHIP	3.3K	5%	1/10W
R2847	1-216-809-11	RES-CHIP	100	5%	1/10W
R2848	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2849	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2850	1-216-809-11	RES-CHIP	100	5%	1/10W
R2851	1-216-815-11	RES-CHIP	330	5%	1/10W
R2854	1-216-864-11	SHORT CHIP	0		
R2858	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R2860	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2861	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2862	1-216-809-11	RES-CHIP	100	5%	1/10W
R2863	1-216-823-11	RES-CHIP	1.5K	5%	1/10W
R2864	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2865	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2866	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2867	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2868	1-216-809-11	RES-CHIP	100	5%	1/10W
R2869	1-216-809-11	RES-CHIP	100	5%	1/10W
R2870	1-216-809-11	RES-CHIP	100	5%	1/10W
R2871	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2872	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2873	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2874	1-216-864-11	SHORT CHIP	0		
R2875	1-216-864-11	SHORT CHIP	0		
R2876	1-216-864-11	SHORT CHIP	0		
R2878	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2879	1-216-853-11	RES-CHIP	470K	5%	1/10W
R2880	1-216-822-11	RES-CHIP	1.2K	5%	1/10W
R2881	1-216-822-11	RES-CHIP	1.2K	5%	1/10W
R2882	1-216-822-11	RES-CHIP	1.2K	5%	1/10W
R2883	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2884	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2885	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2886	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2887	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2889	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2890	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2891	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2892	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2893	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2894	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2895	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2896	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2897	1-216-825-11	RES-CHIP	2.2K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R2898	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2900	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R2901	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R2902	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R2905	1-216-864-11	SHORT CHIP	0		
R2907	1-216-803-11	RES-CHIP	33	5%	1/10W
R2908	1-216-803-11	RES-CHIP	33	5%	1/10W
R2909	1-216-803-11	RES-CHIP	33	5%	1/10W
R2910	1-216-864-11	SHORT CHIP	0		
R2913	1-216-864-11	SHORT CHIP	0		
R2920	1-216-864-11	SHORT CHIP	0		
R2922	1-216-864-11	SHORT CHIP	0		
R2923	1-218-708-11	METAL CHIP	4.7K	0.50%	1/16W
R2924	1-218-708-11	METAL CHIP	4.7K	0.50%	1/16W
R2925	1-218-708-11	METAL CHIP	4.7K	0.50%	1/16W
R3002	1-216-864-11	SHORT CHIP	0		
R3004	1-216-864-11	SHORT CHIP	0		
R3005	1-216-864-11	SHORT CHIP	0		
R3013	1-216-809-11	RES-CHIP	100	5%	1/10W
R3014	1-216-809-11	RES-CHIP	100	5%	1/10W
R3015	1-216-809-11	RES-CHIP	100	5%	1/10W
R3017	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R3020	1-216-827-11	RES-CHIP	3.3K	5%	1/10W
R3021	1-216-809-11	RES-CHIP	100	5%	1/10W
R3022	1-216-809-11	RES-CHIP	100	5%	1/10W
R3023	1-216-833-11	RES-CHIP	10K	5%	1/10W
R3025	1-216-833-11	RES-CHIP	10K	5%	1/10W
R3026	1-216-833-11	RES-CHIP	10K	5%	1/10W
R3029	1-216-833-11	RES-CHIP	10K	5%	1/10W
R3030	1-216-827-11	RES-CHIP	3.3K	5%	1/10W
R3031	1-216-809-11	RES-CHIP	100	5%	1/10W
R3035	1-216-809-11	RES-CHIP	100	5%	1/10W
R3036	1-216-809-11	RES-CHIP	100	5%	1/10W
R3037	1-216-809-11	RES-CHIP	100	5%	1/10W
R3038	1-218-686-11	METAL CHIP	560	0.50%	1/16W
R3039	1-218-686-11	METAL CHIP	560	0.50%	1/16W
R3040	1-218-686-11	METAL CHIP	560	0.50%	1/16W
R3045	1-216-809-11	RES-CHIP	100	5%	1/10W
R3047	1-216-864-11	SHORT CHIP	0		
R3049	1-216-859-11	RES-CHIP	1.5M	5%	1/10W
R3050	1-216-833-11	RES-CHIP	10K	5%	1/10W
R3051	1-216-864-11	SHORT CHIP	0		
R3063	1-216-864-11	SHORT CHIP	0		
R3064	1-216-864-11	SHORT CHIP	0		
R3066	1-216-809-11	RES-CHIP	100	5%	1/10W
R3068	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R3069	1-216-820-11	RES-CHIP	820	5%	1/10W
R3070	1-216-864-11	SHORT CHIP	0		
R3071	1-216-821-11	RES-CHIP	1K	5%	1/10W
R3072	1-216-855-11	RES-CHIP	680K	5%	1/10W
R3073	1-216-855-11	RES-CHIP	680K	5%	1/10W
R3074	1-218-704-11	METAL CHIP	3.3K	0.50%	1/16W
R3075	1-216-801-11	RES-CHIP	22	5%	1/10W
R3076	1-216-864-11	SHORT CHIP	0		
R3077	1-216-841-11	RES-CHIP	47K	5%	1/10W
R3078	1-216-815-11	RES-CHIP	330	5%	1/10W
R3079	1-216-815-11	RES-CHIP	330	5%	1/10W
R3089	1-216-864-11	SHORT CHIP	0		
R3091	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R3092	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R3093	1-216-864-11	SHORT CHIP	0		
R3095	1-216-845-11	RES-CHIP	100K	5%	1/10W
R3096	1-216-817-11	RES-CHIP	470	5%	1/10W
R3097	1-216-845-11	RES-CHIP	100K	5%	1/10W
R3098	1-216-805-11	RES-CHIP	47	5%	1/10W
R3099	1-216-805-11	RES-CHIP	47	5%	1/10W
R3102	1-216-809-11	RES-CHIP	100	5%	1/10W
R3103	1-216-809-11	RES-CHIP	100	5%	1/10W
R3104	1-216-809-11	RES-CHIP	100	5%	1/10W
R3105	1-216-809-11	RES-CHIP	100	5%	1/10W
R3107	1-216-864-11	SHORT CHIP	0		
R3108	1-216-833-11	RES-CHIP	10K	5%	1/10W
R3110	1-216-809-11	RES-CHIP	100	5%	1/10W
R3111	1-216-809-11	RES-CHIP	100	5%	1/10W
R3116	1-216-797-11	RES-CHIP	10	5%	1/10W
R3117	1-216-797-11	RES-CHIP	10	5%	1/10W
R3150	1-216-864-11	SHORT CHIP	0		
R3302	1-216-817-11	RES-CHIP	470	5%	1/10W
R3303	1-218-710-11	METAL CHIP	5.6K	0.50%	1/16W
R3304	1-216-809-11	RES-CHIP	100	5%	1/10W
R3325	1-216-864-11	SHORT CHIP	0		
R3335	1-216-833-11	RES-CHIP	10K	5%	1/10W
R3341	1-216-813-11	RES-CHIP	220	5%	1/10W
R3342	1-218-705-11	METAL CHIP	3.6K	0.50%	1/16W
R3343	1-216-809-11	RES-CHIP	100	5%	1/10W
R3344	1-216-853-11	RES-CHIP	470K	5%	1/10W
R3345	1-218-704-11	METAL CHIP	3.3K	0.50%	1/16W
R3346	1-216-809-11	RES-CHIP	100	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R3347	1-216-815-11	RES-CHIP	330	5%	1/10W
R3348	1-216-864-11	SHORT CHIP	0		
R3349	1-218-687-11	METAL CHIP	620	0.50%	1/16W
R3350	1-216-814-11	RES-CHIP	270	5%	1/10W
R3351	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R3352	1-216-853-11	RES-CHIP	470K	5%	1/10W
R3353	1-216-837-11	RES-CHIP	22K	5%	1/10W
R3354	1-216-813-11	RES-CHIP	220	5%	1/10W
R3355	1-216-821-11	RES-CHIP	1K	5%	1/10W
R3357	1-218-676-11	METAL CHIP	220	0.50%	1/16W
R3358	1-218-676-11	METAL CHIP	220	0.50%	1/16W
R3359	1-218-676-11	METAL CHIP	220	0.50%	1/16W
R3360	1-216-827-11	RES-CHIP	3.3K	5%	1/10W
R3365	1-216-827-11	RES-CHIP	3.3K	5%	1/10W
R3367	1-216-805-11	RES-CHIP	47	5%	1/10W
R3368	1-216-864-11	SHORT CHIP	0		
R3370	1-216-833-11	RES-CHIP	10K	5%	1/10W
R3371	1-218-686-11	METAL CHIP	560	0.50%	1/16W
R3372	1-216-817-11	RES-CHIP	470	5%	1/10W
R3373	1-216-817-11	RES-CHIP	470	5%	1/10W
R3374	1-216-809-11	RES-CHIP	100	5%	1/10W
R3375	1-218-686-11	METAL CHIP	560	0.50%	1/16W
R3376	1-218-710-11	METAL CHIP	5.6K	0.50%	1/16W
R3377	1-216-817-11	RES-CHIP	470	5%	1/10W
R3378	1-216-817-11	RES-CHIP	470	5%	1/10W
R3379	1-216-809-11	RES-CHIP	100	5%	1/10W
R3380	1-218-686-11	METAL CHIP	560	0.50%	1/16W
R3381	1-218-710-11	METAL CHIP	5.6K	0.50%	1/16W
R3383	1-216-817-11	RES-CHIP	470	5%	1/10W
R3395	1-216-864-11	SHORT CHIP	0		
R3396	1-216-864-11	SHORT CHIP	0		
R3400	1-216-864-11	SHORT CHIP	0		
R3401	1-216-864-11	SHORT CHIP	0		
R3406	1-216-833-11	RES-CHIP	10K	5%	1/10W
R3407	1-216-864-11	SHORT CHIP	0		
R3409	1-216-864-11	SHORT CHIP	0		
R3410	1-216-833-11	RES-CHIP	10K	5%	1/10W
R3411	1-216-797-11	RES-CHIP	10	5%	1/10W
R3421	1-216-864-11	SHORT CHIP	0		
R3422	1-216-864-11	SHORT CHIP	0		
R3425	1-216-864-11	SHORT CHIP	0		
R3428	1-469-094-21	FERRITE	0μH		
R3435	1-216-809-11	RES-CHIP	100	5%	1/10W
R3436	1-216-809-11	RES-CHIP	100	5%	1/10W
R3437	1-216-809-11	RES-CHIP	100	5%	1/10W
R3438	1-216-809-11	RES-CHIP	100	5%	1/10W
R3439	1-216-809-11	RES-CHIP	100	5%	1/10W
R3440	1-216-809-11	RES-CHIP	100	5%	1/10W
R3441	1-216-809-11	RES-CHIP	100	5%	1/10W
R3442	1-216-833-11	RES-CHIP	10K	5%	1/10W
R3445	1-216-864-11	SHORT CHIP	0		
R3451	1-216-809-11	RES-CHIP	100	5%	1/10W
R3452	1-216-864-11	SHORT CHIP	0		
R3454	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R3457	1-216-813-11	RES-CHIP	220	5%	1/10W
R3460	1-216-833-11	RES-CHIP	10K	5%	1/10W
R3461	1-216-833-11	RES-CHIP	10K	5%	1/10W
R3466	1-216-813-11	RES-CHIP	220	5%	1/10W
R3468	1-216-864-11	SHORT CHIP	0		
R3469	1-216-864-11	SHORT CHIP	0		
R3470	1-216-809-11	RES-CHIP	100	5%	1/10W
R3473	1-216-864-11	SHORT CHIP	0		
R3475	1-216-809-11	RES-CHIP	100	5%	1/10W
R3480	1-216-809-11	RES-CHIP	100	5%	1/10W
R3489	1-216-864-11	SHORT CHIP	0		
R3490	1-216-864-11	SHORT CHIP	0		
R3494	1-216-813-11	RES-CHIP	220	5%	1/10W
R3497	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R3498	1-216-818-11	RES-CHIP	560	5%	1/10W
R3507	1-216-821-11	RES-CHIP	1K	5%	1/10W
R3508	1-216-821-11	RES-CHIP	1K	5%	1/10W
R3509	1-216-821-11	RES-CHIP	1K	5%	1/10W
R3510	1-216-821-11	RES-CHIP	1K	5%	1/10W
R3511	1-216-821-11	RES-CHIP	1K	5%	1/10W
R3512	1-216-821-11	RES-CHIP	1K	5%	1/10W
R3533	1-216-809-11	RES-CHIP	100	5%	1/10W
R3534	1-216-809-11	RES-CHIP	100	5%	1/10W
R3535	1-216-809-11	RES-CHIP	100	5%	1/10W
R3536	1-216-833-11	RES-CHIP	10K	5%	1/10W
R3537	1-216-833-11	RES-CHIP	10K	5%	1/10W
R3538	1-216-864-11	SHORT CHIP	0		
R3539	1-216-864-11	SHORT CHIP	0		
R3540	1-216-864-11	SHORT CHIP	0		
R3541	1-216-864-11	SHORT CHIP	0		
R3542	1-216-864-11	SHORT CHIP	0		
R3575	1-216-864-11	SHORT CHIP	0		
R3601	1-216-864-11	SHORT CHIP	0		
R3602	1-216-864-11	SHORT CHIP	0		

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R3603	1-216-864-11	SHORT CHIP	0		
R3604	1-216-864-11	SHORT CHIP	0		
R3605	1-216-864-11	SHORT CHIP	0		
R3606	1-216-864-11	SHORT CHIP	0		
R3607	1-216-864-11	SHORT CHIP	0		
R3608	1-216-864-11	SHORT CHIP	0		
R3609	1-216-864-11	SHORT CHIP	0		
R3610	1-216-833-11	RES-CHIP	10K	5%	1/10W
R3611	1-216-833-11	RES-CHIP	10K	5%	1/10W
R3612	1-216-845-11	RES-CHIP	100K	5%	1/10W
R3613	1-216-801-11	RES-CHIP	22	5%	1/10W
R3614	1-216-827-11	RES-CHIP	3.3K	5%	1/10W
R3615	1-218-867-11	RES-CHIP	6.8K	5%	1/10W
R3616	1-216-809-11	RES-CHIP	100	5%	1/10W
R3617	1-216-833-11	RES-CHIP	10K	5%	1/10W
R3800	1-216-864-11	SHORT CHIP	0		
R3811	1-216-809-11	RES-CHIP	100	5%	1/10W
R3812	1-216-809-11	RES-CHIP	100	5%	1/10W
R3813	1-216-809-11	RES-CHIP	100	5%	1/10W
R3820	1-218-684-11	METAL CHIP	470	0.50%	1/16W
R3821	1-218-684-11	METAL CHIP	470	0.50%	1/16W
R3822	1-218-684-11	METAL CHIP	470	0.50%	1/16W
R3823	1-216-826-11	RES-CHIP	2.7K	5%	1/10W
R3824	1-216-826-11	RES-CHIP	2.7K	5%	1/10W
R3825	1-216-826-11	RES-CHIP	2.7K	5%	1/10W
R3826	1-216-809-11	RES-CHIP	100	5%	1/10W
R3828	1-218-682-11	METAL CHIP	390	0.50%	1/16W
R3829	1-218-682-11	METAL CHIP	390	0.50%	1/16W
R3830	1-218-682-11	METAL CHIP	390	0.50%	1/16W
R3831	1-216-864-11	SHORT CHIP	0		
R3832	1-216-864-11	SHORT CHIP	0		
R3833	1-216-864-11	SHORT CHIP	0		
R3840	1-216-805-11	RES-CHIP	47	5%	1/10W
R3846	1-216-801-11	RES-CHIP	22	5%	1/10W
R3847	1-216-801-11	RES-CHIP	22	5%	1/10W
R3848	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R3849	1-218-675-11	METAL CHIP	200	0.50%	1/16W
R3850	1-218-675-11	METAL CHIP	200	0.50%	1/16W
R3851	1-216-809-11	RES-CHIP	100	5%	1/10W
R3852	1-218-675-11	METAL CHIP	200	0.50%	1/16W
R3854	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R3857	1-216-809-11	RES-CHIP	100	5%	1/10W
R3858	1-218-704-11	METAL CHIP	3.3K	0.50%	1/16W
R3862	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R3863	1-218-700-11	METAL CHIP	2.2K	0.50%	1/16W
R3864	1-216-827-11	RES-CHIP	3.3K	5%	1/10W
R3865	1-216-809-11	RES-CHIP	100	5%	1/10W
R3866	1-414-234-22	FERRITE	0μH		
R3867	1-414-234-22	FERRITE	0μH		
R3868	1-414-234-22	FERRITE	0μH		
R3881	1-216-807-11	RES-CHIP	68	5%	1/10W
R3882	1-216-807-11	RES-CHIP	68	5%	1/10W
R3883	1-216-807-11	RES-CHIP	68	5%	1/10W
R3911	1-216-821-11	RES-CHIP	1K	5%	1/10W
R3917	1-216-809-11	RES-CHIP	100	5%	1/10W
R3928	1-216-833-11	RES-CHIP	10K	5%	1/10W
R3933	1-216-864-11	SHORT CHIP	0		
R3956	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R3957	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R3958	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R3973	1-216-809-11	RES-CHIP	100	5%	1/10W
R3974	1-216-833-11	RES-CHIP	10K	5%	1/10W
R3984	1-218-644-11	METAL CHIP	10	0.50%	1/16W
R3985	1-218-644-11	METAL CHIP	10	0.50%	1/16W
R3986	1-218-644-11	METAL CHIP	10	0.50%	1/16W
R8606	1-216-819-11	RES-CHIP	680	5%	1/10W
R8607	1-216-819-11	RES-CHIP	680	5%	1/10W
R8608	1-216-819-11	RES-CHIP	680	5%	1/10W
R8609	1-216-809-11	RES-CHIP	100	5%	1/10W
R8610	1-216-809-11	RES-CHIP	100	5%	1/10W
R8611	1-216-809-11	RES-CHIP	100	5%	1/10W
R8612	1-216-820-11	RES-CHIP	820	5%	1/10W
R8613	1-216-820-11	RES-CHIP	820	5%	1/10W
R8614	1-216-820-11	RES-CHIP	820	5%	1/10W
R8615	1-216-809-11	RES-CHIP	100	5%	1/10W
R8616	1-216-809-11	RES-CHIP	100	5%	1/10W
R8617	1-216-809-11	RES-CHIP	100	5%	1/10W
R8618	1-218-679-11	METAL CHIP	300	0.50%	1/16W
R8619	1-218-679-11	METAL CHIP	300	0.50%	1/16W
R8620	1-218-675-11	METAL CHIP	200	0.50%	1/16W
R8621	1-216-821-11	RES-CHIP	1K	5%	1/10W
R8622	1-218-679-11	METAL CHIP	300	0.50%	1/16W
R8623	1-218-679-11	METAL CHIP	300	0.50%	1/16W
R8624	1-218-675-11	METAL CHIP	200	0.50%	1/16W
R8625	1-216-821-11	RES-CHIP	1K	5%	1/10W
R8626	1-216-809-11	RES-CHIP	100	5%	1/10W
R8627	1-216-809-11	RES-CHIP	100	5%	1/10W
R8628	1-216-809-11	RES-CHIP	100	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R8629	1-216-823-11	RES-CHIP	1.5K	5%	1/10W
R8630	1-216-823-11	RES-CHIP	1.5K	5%	1/10W
R8631	1-216-823-11	RES-CHIP	1.5K	5%	1/10W
R8632	1-216-821-11	RES-CHIP	1K	5%	1/10W
R8636	1-216-821-11	RES-CHIP	1K	5%	1/10W
R8637	1-216-821-11	RES-CHIP	1K	5%	1/10W
R8638	1-216-821-11	RES-CHIP	1K	5%	1/10W
R8639	1-218-704-11	METAL CHIP	3.3K	0.50%	1/16W
R8641	1-216-821-11	RES-CHIP	1K	5%	1/10W
R8642	1-218-703-11	METAL CHIP	3K	0.50%	1/16W
R8643	1-216-821-11	RES-CHIP	1K	5%	1/10W
R8645	1-216-821-11	RES-CHIP	1K	5%	1/10W
R8646	1-216-821-11	RES-CHIP	1K	5%	1/10W
R8647	1-216-833-11	RES-CHIP	10K	5%	1/10W
R8648	1-216-830-11	RES-CHIP	5.6K	5%	1/10W
R8650	1-216-833-11	RES-CHIP	10K	5%	1/10W
R8651	1-216-801-11	RES-CHIP	22	5%	1/10W
R8652	1-216-833-11	RES-CHIP	10K	5%	1/10W
R8653	1-216-833-11	RES-CHIP	10K	5%	1/10W
R8654	1-216-864-11	SHORT CHIP	0		
R8655	1-216-864-11	SHORT CHIP	0		

RESISTOR BRIDGE

REF. NO.	PART NO.	DESCRIPTION	VALUES	
RB3005	1-239-409-11	RES, CHIP NETWORK	47	-3216
RB3006	1-239-409-11	RES, CHIP NETWORK	47	-3216
RB3007	1-239-409-11	RES, CHIP NETWORK	47	-3216
RB3008	1-239-409-11	RES, CHIP NETWORK	47	-3216
RB3009	1-239-409-11	RES, CHIP NETWORK	47	-3216
RB3010	1-239-409-11	RES, CHIP NETWORK	47	-3216
RB3011	1-239-409-11	RES, CHIP NETWORK	47	-3216
RB3012	1-239-409-11	RES, CHIP NETWORK	47	-3216
RB3013	1-239-409-11	RES, CHIP NETWORK	47	-3216
RB3014	1-239-409-11	RES, CHIP NETWORK	47	-3216
RB3015	1-239-409-11	RES, CHIP NETWORK	47	-3216
RB3100	1-233-574-11	RES, CHIP NETWORK	10	
RB3101	1-233-574-11	RES, CHIP NETWORK	10	
RB3102	1-233-574-11	RES, CHIP NETWORK	10	
RB3103	1-233-574-11	RES, CHIP NETWORK	10	
RB3304	1-233-576-11	RES, CHIP NETWORK	100	
RB3305	1-233-576-11	RES, CHIP NETWORK	100	
RB3306	1-233-576-11	RES, CHIP NETWORK	100	
RB3307	1-233-576-11	RES, CHIP NETWORK	100	
RB3401	1-234-524-21	RES, CHIP NETWORK	33	
RB3402	1-234-524-21	RES, CHIP NETWORK	33	
RB3403	1-234-524-21	RES, CHIP NETWORK	33	
RB3404	1-234-524-21	RES, CHIP NETWORK	33	
RB3405	1-234-524-21	RES, CHIP NETWORK	33	
RB3406	1-234-524-21	RES, CHIP NETWORK	33	
RB3407	1-239-409-11	RES, CHIP NETWORK	47	-3216
RB3408	1-239-409-11	RES, CHIP NETWORK	47	-3216
RB3409	1-239-409-11	RES, CHIP NETWORK	47	-3216
RB3410	1-239-409-11	RES, CHIP NETWORK	47	-3216
RB3411	1-239-409-11	RES, CHIP NETWORK	47	-3216
RB3412	1-239-409-11	RES, CHIP NETWORK	47	-3216
RB3421	1-233-576-11	RES, CHIP NETWORK	100	
RB3422	1-233-576-11	RES, CHIP NETWORK	100	
RB3423	1-233-576-11	RES, CHIP NETWORK	100	
RB3424	1-233-576-11	RES, CHIP NETWORK	100	
RB3425	1-233-576-11	RES, CHIP NETWORK	100	
RB3426	1-233-576-11	RES, CHIP NETWORK	100	
RB3427	1-233-576-11	RES, CHIP NETWORK	100	
RB3428	1-233-576-11	RES, CHIP NETWORK	100	
RB3436	1-234-523-21	RES, CHIP NETWORK	0	-3216
RB3437	1-234-523-21	RES, CHIP NETWORK	0	-3216
RB3438	1-234-523-21	RES, CHIP NETWORK	0	-3216
RB3439	1-234-523-21	RES, CHIP NETWORK	0	-3216

CRYSTAL

REF. NO.	PART NO.	DESCRIPTION
X2801	1-760-895-21	VIBRATOR, CERAMIC
X3089	1-781-945-21	VIBRATOR, CERAMIC
X3401	1-781-887-21	VIBRATOR, CRYSTAL

MS1

The MS1 board is not field repairable. If service is required, use the following part number to order a complete replacement board. Data is provided for reference only.

*****	**A-1300-408-A**	**MS1 BOARD, COMPLETE**

CAPACITOR

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C101	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C102	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C103	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C105	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C106	1-110-501-11	CERAMIC CHIP	0.33µF	10%	16V
C107	1-126-390-11	ELECT CHIP	22µF	20%	6.3V
C108	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C109	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C110	1-126-394-11	ELECT CHIP	10μF	20%	16V
C111	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C112	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C113	1-162-916-11	CERAMIC CHIP	12pF	5%	50V
C114	1-162-916-11	CERAMIC CHIP	12pF	5%	50V
C115	1-115-416-11	CERAMIC CHIP	0.001μF	5%	25V
C116	1-115-416-11	CERAMIC CHIP	0.001μF	5%	25V
C117	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C118	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C119	1-216-864-11	SHORT CHIP	0		
C121	1-216-821-11	RES-CHIP	1K	5%	1/10W
C123	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C124	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C125	1-128-934-91	CERAMIC CHIP	0.33μF	20%	10V
C127	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C128	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C129	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C130	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C131	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C132	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C133	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C134	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C135	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C136	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C137	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C138	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C139	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C140	1-126-390-11	ELECT CHIP	22μF	20%	6.3V
C141	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C142	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C143	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C144	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C145	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C146	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C147	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C148	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C149	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C150	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C151	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C152	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C153	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C154	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C158	1-124-779-00	ELECT CHIP	10μF	20%	16V
C159	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C160	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C161	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C162	1-126-394-11	ELECT CHIP	10μF	20%	16V
C163	1-126-394-11	ELECT CHIP	10μF	20%	16V
C165	1-124-779-00	ELECT CHIP	10μF	20%	16V
C166	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C167	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C168	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C169	1-124-779-00	ELECT CHIP	10μF	20%	16V
C185	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V

CONNECTOR

REF. NO.	PART NO.	DESCRIPTION
CN104	1-816-068-21	CONNECTOR, BOARD TO BOARD 60P

DIODE

REF. NO.	PART NO.	DESCRIPTION
D102	8-719-024-79	DIODE HN2D01FU-TE85R
D103	8-719-024-79	DIODE HN2D01FU-TE85R
D104	8-719-024-79	DIODE HN2D01FU-TE85R
D105	8-719-024-79	DIODE HN2D01FU-TE85R
D106	8-719-024-79	DIODE HN2D01FU-TE85R

FERRITE BEAD

REF. NO.	PART NO.	DESCRIPTION	VALUES
FB101	1-414-921-11	FERRITE	0μH
FB102	1-414-921-11	FERRITE	0μH
FB103	1-414-921-11	FERRITE	0μH
FB104	1-414-921-11	FERRITE	0μH
FB105	1-414-921-11	FERRITE	0μH
FB106	1-500-451-11	FERRITE	0μH
FB107	1-414-921-11	FERRITE	0μH
FB108	1-414-921-11	FERRITE	0μH
FB109	1-414-921-11	FERRITE	0μH
FB110	1-414-921-11	FERRITE	0μH
FB111	1-414-921-11	FERRITE	0μH
FB112	1-414-228-11	FERRITE	0μH
FB120	1-414-921-11	FERRITE	0μH
FB121	1-414-921-11	FERRITE	0μH
FB122	1-414-921-11	FERRITE	0μH
FB123	1-414-921-11	FERRITE	0μH
FB124	1-414-921-11	FERRITE	0μH
FB125	1-414-921-11	FERRITE	0μH
FB126	1-414-921-11	FERRITE	0μH
FB137	1-414-921-11	FERRITE	0μH

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

REF. NO.	PART NO.	DESCRIPTION	VALUES
FB138	1-414-921-11	FERRITE	0µH
FB139	1-414-921-11	FERRITE	0µH
FB140	1-216-864-11	SHORT CHIP	0
FB141	1-414-921-11	FERRITE	0µH
FB142	1-216-864-11	SHORT CHIP	0
FB143	1-414-921-11	FERRITE	0µH
FB144	1-216-864-11	SHORT CHIP	0
FB145	1-216-864-11	SHORT CHIP	0
FB146	1-216-864-11	SHORT CHIP	0
FB147	1-216-864-11	SHORT CHIP	0
FB148	1-216-864-11	SHORT CHIP	0
FB149	1-414-921-11	FERRITE	0µH
FB152	1-216-864-11	SHORT CHIP	0
FB153	1-216-864-11	SHORT CHIP	0
FB154	1-216-864-11	SHORT CHIP	0
FB155	1-216-864-11	SHORT CHIP	0

IC

REF. NO.	PART NO.	DESCRIPTION	VALUES
IC101	6-700-921-01	IC MD2305F	
⚠ IC102	6-801-874-11	IC SST39VF800A70-11124-T	
IC103	6-701-043-11	IC HM62V16256CLTT-5SLZ	
IC104	8-759-460-72	IC BA033FP-E2	
IC105	8-759-584-32	IC MB86189pFV-G-BND-ER	
IC106	8-759-661-55	IC 24LC21AT/SN	
IC108	6-702-511-01	IC MT48LC8M16A2TG-75-Y95W	
IC109	6-702-038-01	IC PST3628NL	
IC110	6-800-922-01	IC ISPLSI2032VE-110LT44/10921	
IC115	8-759-698-31	IC TC7WH74FK(TE85R)	
IC119	8-759-592-50	IC TC7SZ126FU(TE85R)	
IC120	8-759-592-50	IC TC7SZ126FU(TE85R)	
IC121	8-752-927-18	IC CXP85112B-679Q	
IC122	8-759-349-11	IC PST9145NL	
IC126	8-759-058-58	IC TC7S04FU(TE85R)	

COIL

REF. NO.	PART NO.	DESCRIPTION	VALUES
L106	1-469-555-21	INDUCTOR	10µH
L107	1-469-561-21	INDUCTOR	100µH

TRANSISTOR

REF. NO.	PART NO.	DESCRIPTION	VALUES
Q101	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q103	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q104	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q105	8-729-427-72	TRANSISTOR HN1C01FU-TE85R	
Q110	8-729-900-53	TRANSISTOR DTC114EKA-T146	
Q116	8-729-900-53	TRANSISTOR DTC114EKA-T146	

RESISTOR

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R101	1-216-797-11	RES-CHIP	10	5%	1/10W
R102	1-216-797-11	RES-CHIP	10	5%	1/10W
R103	1-216-797-11	RES-CHIP	10	5%	1/10W
R104	1-216-864-11	SHORT CHIP	0		
R105	1-216-864-11	SHORT CHIP	0		
R106	1-216-864-11	SHORT CHIP	0		
R107	1-216-864-11	SHORT CHIP	0		
R108	1-216-833-11	RES-CHIP	10K	5%	1/10W
R109	1-216-864-11	SHORT CHIP	0		
R110	1-216-833-11	RES-CHIP	10K	5%	1/10W
R111	1-216-833-11	RES-CHIP	10K	5%	1/10W
R112	1-216-833-11	RES-CHIP	10K	5%	1/10W
R113	1-216-833-11	RES-CHIP	10K	5%	1/10W
R114	1-216-864-11	SHORT CHIP	0		
R115	1-216-845-11	RES-CHIP	100K	5%	1/10W
R116	1-216-845-11	RES-CHIP	100K	5%	1/10W
R117	1-216-864-11	SHORT CHIP	0		
R118	1-216-845-11	RES-CHIP	100K	5%	1/10W
R119	1-216-845-11	RES-CHIP	100K	5%	1/10W
R120	1-216-845-11	RES-CHIP	100K	5%	1/10W
R121	1-216-864-11	SHORT CHIP	0		
R122	1-216-833-11	RES-CHIP	10K	5%	1/10W
R123	1-216-833-11	RES-CHIP	10K	5%	1/10W
R126	1-216-821-11	RES-CHIP	1K	5%	1/10W
R127	1-216-833-11	RES-CHIP	10K	5%	1/10W
R128	1-216-864-11	SHORT CHIP	0		
R130	1-216-845-11	RES-CHIP	100K	5%	1/10W
R131	1-216-821-11	RES-CHIP	1K	5%	1/10W
R132	1-216-827-11	RES-CHIP	3.3K	5%	1/10W
R133	1-218-867-11	RES-CHIP	6.8K	5%	1/10W
R134	1-216-833-11	RES-CHIP	10K	5%	1/10W
R135	1-216-833-11	RES-CHIP	10K	5%	1/10W
R136	1-216-809-11	RES-CHIP	100	5%	1/10W
R138	1-216-833-11	RES-CHIP	10K	5%	1/10W
R140	1-216-833-11	RES-CHIP	10K	5%	1/10W
R141	1-216-864-11	SHORT CHIP	0		
R142	1-216-864-11	SHORT CHIP	0		
R143	1-216-833-11	RES-CHIP	10K	5%	1/10W
R144	1-216-809-11	RES-CHIP	100	5%	1/10W
R145	1-216-809-11	RES-CHIP	100	5%	1/10W
R146	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R147	1-216-864-11	SHORT CHIP	0		

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R148	1-216-839-11	RES-CHIP	33K	5%	1/10W
R149	1-216-839-11	RES-CHIP	33K	5%	1/10W
R152	1-216-833-11	RES-CHIP	10K	5%	1/10W
R153	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R154	1-216-864-11	SHORT CHIP	0		
R155	1-216-864-11	SHORT CHIP	0		
R156	1-216-845-11	RES-CHIP	100K	5%	1/10W
R157	1-216-809-11	RES-CHIP	100	5%	1/10W
R158	1-216-864-11	SHORT CHIP	0		
R159	1-216-833-11	RES-CHIP	10K	5%	1/10W
R160	1-216-833-11	RES-CHIP	10K	5%	1/10W
R161	1-216-801-11	RES-CHIP	22	5%	1/10W
R162	1-216-809-11	RES-CHIP	100	5%	1/10W
R163	1-216-809-11	RES-CHIP	100	5%	1/10W
R164	1-216-833-11	RES-CHIP	10K	5%	1/10W
R166	1-216-864-11	SHORT CHIP	0		
R167	1-216-809-11	RES-CHIP	100	5%	1/10W
R168	1-216-864-11	SHORT CHIP	0		
R169	1-216-809-11	RES-CHIP	100	5%	1/10W
R170	1-216-864-11	SHORT CHIP	0		
R171	1-216-809-11	RES-CHIP	100	5%	1/10W
R172	1-216-864-11	SHORT CHIP	0		
R173	1-216-801-11	RES-CHIP	22	5%	1/10W
R174	1-216-864-11	SHORT CHIP	0		
R176	1-216-864-11	SHORT CHIP	0		
R177	1-216-864-11	SHORT CHIP	0		
R178	1-216-864-11	SHORT CHIP	0		
R180	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R181	1-216-833-11	RES-CHIP	10K	5%	1/10W
R184	1-216-809-11	RES-CHIP	100	5%	1/10W
R186	1-216-864-11	SHORT CHIP	0		
R189	1-216-864-11	SHORT CHIP	0		
R190	1-216-864-11	SHORT CHIP	0		
R192	1-216-833-11	RES-CHIP	10K	5%	1/10W
R193	1-216-833-11	RES-CHIP	10K	5%	1/10W
R195	1-216-801-11	RES-CHIP	22	5%	1/10W
R196	1-216-809-11	RES-CHIP	100	5%	1/10W
R197	1-216-809-11	RES-CHIP	100	5%	1/10W
R199	1-216-833-11	RES-CHIP	10K	5%	1/10W
R200	1-216-833-11	RES-CHIP	10K	5%	1/10W
R203	1-216-864-11	SHORT CHIP	0		
R204	1-216-864-11	SHORT CHIP	0		
R206	1-216-809-11	RES-CHIP	100	5%	1/10W
R207	1-216-864-11	SHORT CHIP	0		

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R208	1-216-801-11	RES-CHIP	22	5%	1/10W
R209	1-216-809-11	RES-CHIP	100	5%	1/10W
R213	1-218-830-11	METAL CHIP	200	0.50%	1/10W
R216	1-216-864-11	SHORT CHIP	0		
R217	1-216-833-11	RES-CHIP	10K	5%	1/10W
R218	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R219	1-216-833-11	RES-CHIP	10K	5%	1/10W
R220	1-216-864-11	SHORT CHIP	0		
R221	1-216-809-11	RES-CHIP	100	5%	1/10W
R222	1-216-809-11	RES-CHIP	100	5%	1/10W
R224	1-216-833-11	RES-CHIP	10K	5%	1/10W
R225	1-216-833-11	RES-CHIP	10K	5%	1/10W
R226	1-216-833-11	RES-CHIP	10K	5%	1/10W
R230	1-216-833-11	RES-CHIP	10K	5%	1/10W
R231	1-216-864-11	SHORT CHIP	0		
R233	1-216-833-11	RES-CHIP	10K	5%	1/10W
R245	1-216-833-11	RES-CHIP	10K	5%	1/10W
R246	1-216-809-11	RES-CHIP	100	5%	1/10W
R283	1-216-833-11	RES-CHIP	10K	5%	1/10W
R284	1-216-833-11	RES-CHIP	10K	5%	1/10W
R286	1-216-833-11	RES-CHIP	10K	5%	1/10W
R287	1-216-833-11	RES-CHIP	10K	5%	1/10W
R288	1-216-797-11	RES-CHIP	10	5%	1/10W
R290	1-216-797-11	RES-CHIP	10	5%	1/10W
R292	1-216-821-11	RES-CHIP	1K	5%	1/10W
R295	1-216-864-11	SHORT CHIP	0		
R297	1-216-833-11	RES-CHIP	10K	5%	1/10W
R9239	1-216-803-11	RES-CHIP	33	5%	1/10W
R9240	1-216-803-11	RES-CHIP	33	5%	1/10W
R9242	1-216-803-11	RES-CHIP	33	5%	1/10W
R9243	1-216-803-11	RES-CHIP	33	5%	1/10W

RESISTOR BRIDGE

REF. NO.	PART NO.	DESCRIPTION	VALUES	
RB101	1-233-810-21	RES, NETWORK	100K	-3216
RB102	1-233-810-21	RES, NETWORK	100K	-3216
RB103	1-233-810-21	RES, NETWORK	100K	-3216
RB104	1-233-810-21	RES, NETWORK	100K	-3216
RB105	1-233-576-11	RES, CHIP NETWORK	100	
RB106	1-236-908-11	RES, CHIP NETWORK	10K	-3216
RB107	1-233-574-11	RES, CHIP NETWORK	10	
RB108	1-233-574-11	RES, CHIP NETWORK	10	
RB109	1-233-574-11	RES, CHIP NETWORK	10	
RB110	1-233-574-11	RES, CHIP NETWORK	10	

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

REF. NO.	PART NO.	DESCRIPTION	VALUES		
RB112	1-233-574-11	RES, CHIP NETWORK	10		
RB113	1-233-574-11	RES, CHIP NETWORK	10		
RB114	1-233-574-11	RES, CHIP NETWORK	10		
RB115	1-233-574-11	RES, CHIP NETWORK	10		
RB116	1-233-574-11	RES, CHIP NETWORK	10		
RB117	1-233-574-11	RES, CHIP NETWORK	10		
RB118	1-233-574-11	RES, CHIP NETWORK	10		
RB119	1-233-574-11	RES, CHIP NETWORK	10		
RB120	1-233-574-11	RES, CHIP NETWORK	10		
RB121	1-239-409-11	RES, CHIP NETWORK	47	-3216	
RB122	1-239-409-11	RES, CHIP NETWORK	47	-3216	
RB123	1-239-409-11	RES, CHIP NETWORK	47	-3216	
RB124	1-239-409-11	RES, CHIP NETWORK	47	-3216	
RB125	1-233-574-11	RES, CHIP NETWORK	10		
RB126	1-233-574-11	RES, CHIP NETWORK	10		
RB127	1-233-574-11	RES, CHIP NETWORK	10		
RB128	1-233-574-11	RES, CHIP NETWORK	10		
RB129	1-233-810-21	RES, NETWORK	100K	-3216	
RB130	1-233-810-21	RES, NETWORK	100K	-3216	
RB131	1-236-908-11	RES, CHIP NETWORK	10K	-3216	
RB132	1-236-908-11	RES, CHIP NETWORK	10K	-3216	
RB133	1-236-908-11	RES, CHIP NETWORK	10K	-3216	
RB134	1-236-908-11	RES, CHIP NETWORK	10K	-3216	
RB135	1-233-416-11	RES, CHIP NETWORK	22K	-3216	
RB136	1-233-416-11	RES, CHIP NETWORK	22K	-3216	
RB137	1-233-810-21	RES, NETWORK	100K	-3216	
RB138	1-233-810-21	RES, NETWORK	100K	-3216	

CRYSTAL

REF. NO.	PART NO.	DESCRIPTION	VALUES
X101	1-795-098-21	VIBRATOR, CRYSTAL	
X102	1-795-116-21	VIBRATOR, CERAMIC	
X104	1-781-076-11	OSCILLATOR, CRYSTAL	

G

REF. NO.	PART NO.	DESCRIPTION	VALUES
⚠ *	A-1300-410-A	G BOARD, COMPLETE	
*	4-374-846-01	COVER,CAPACITOR, CAP TYPE	
	4-382-854-11	SCREW (M3X10), P, SW (+)	

CAPACITOR

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C6501	1-126-933-11	ELECT	100μF	20%	16V
C6502	1-126-937-11	ELECT	4700μF	20%	16V
C6503	1-126-933-11	ELECT	100μF	20%	16V
C6514	1-126-943-11	ELECT	2200μF	20%	25V
C6516	1-104-665-11	ELECT	100μF	20%	25V
C6517	1-126-933-11	ELECT	100μF	20%	16V
C6521	1-126-768-11	ELECT	2200μF	20%	16V
C6525	1-104-665-11	ELECT	100μF	20%	25V
C6526	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C6531	1-126-943-11	ELECT	2200μF	20%	25V
C6532	1-115-781-11	ELECT	220μF	20%	25V
C6534	1-104-665-11	ELECT	100μF	20%	25V
C6535	1-126-943-11	ELECT	2200μF	20%	25V
C6536	1-115-781-11	ELECT	220μF	20%	25V
C6541	1-126-941-11	ELECT	470μF	20%	25V
C6542	1-104-665-11	ELECT	100μF	20%	25V
C6546	1-126-941-11	ELECT	470μF	20%	25V
C6547	1-104-665-11	ELECT	100μF	20%	25V
C6553	1-137-651-11	ELECT	560μF	20%	160V
C6554	1-137-651-11	ELECT	560μF	20%	160V
C6560	1-128-550-11	ELECT	2200μF	20%	50V
C6561	1-126-964-11	ELECT	10μF	20%	50V
C6567	1-126-947-11	ELECT	47μF	20%	25V
C6568	1-126-947-11	ELECT	47μF	20%	25V
C6569	1-104-665-11	ELECT	100μF	20%	25V
C6570	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C6572	1-126-933-11	ELECT	100μF	20%	16V
C6573	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C6575	1-126-963-11	ELECT	4.7μF	20%	50V
C6581	1-104-666-11	ELECT	220μF	20%	25V
C6702	1-161-964-91	CERAMIC	0.0047μF		250V
C6703	1-161-964-91	CERAMIC	0.0047μF		250V
C6704	1-100-215-11	ELECT	1800μF	20%	250V
⚠ C6705	1-104-706-11	MYLAR	0.22μF	20%	250V
C6707	1-161-964-91	CERAMIC	0.0047μF		250V
C6708	1-161-964-91	CERAMIC	0.0047μF		250V
C6709	1-164-645-11	CERAMIC	1000pF	10%	500V
C6710	1-100-215-11	ELECT	1800μF	20%	250V
C6711	1-165-950-11	FILM	68000pF	3%	800V
C6712	1-125-969-91	CERAMIC	680pF	10%	1KV
C6714	1-162-974-11	CERAMIC CHIP	0.01μF		50V
C6715	1-136-479-11	FILM	0.001μF	2%	50V
C6717	1-117-228-11	MYLAR	2.2μF	10%	450V
C6718	1-136-165-00	FILM	0.1μF	5%	50V
C6719	1-126-964-11	ELECT	10μF	20%	50V
C6720	1-125-969-91	CERAMIC	680pF	10%	1KV
C6721	1-126-963-11	ELECT	4.7μF	20%	50V

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	C6723	1-126-949-11	ELECT	220μF	20%	35V
	C6724	1-126-967-11	ELECT	47μF	20%	50V
	C6725	1-162-964-11	CERAMIC CHIP	0.001μF	10%	50V
	C6726	1-126-947-11	ELECT	47μF	20%	25V
	C6727	1-126-968-11	ELECT	100μF	20%	50V

CONNECTOR

	REF. NO.	PART NO.	DESCRIPTION	VALUES
	CN6503	1-779-092-11	PIN,CONNECTOR (PC BOARD)	10P
*	CN6504	1-564-508-11	PLUG,CONNECTOR	5P
*	CN6505	1-564-507-11	PLUG,CONNECTOR	4P
	CN6506	1-764-334-11	PLUG,CONNECTOR	11P
*	CN6507	1-564-515-11	PLUG,CONNECTOR	12P
*	CN6701	1-766-240-11	PIN,CONNECTOR (PC BOARD)	2P

DIODE

REF. NO.	PART NO.	DESCRIPTION
D6501	8-719-988-61	DIODE 1SS355TE-17
D6502	8-719-052-92	DIODE D10SBS4F
D6503	8-719-510-37	DIODE D5LC20U
D6504	8-719-988-61	DIODE 1SS355TE-17
D6505	8-719-988-61	DIODE 1SS355TE-17
D6507	8-719-083-67	DIODE UDZSTE-1720B
D6511	8-719-060-89	DIODE D4SBS6-F
D6514	8-719-063-74	DIODE D1NL20U-TR2
D6515	8-719-060-89	DIODE D4SBS6-F
D6517	8-719-083-73	DIODE UDZSTE-1736B
D6518	8-719-050-18	DIODE D4SBL20U
D6519	8-719-060-89	DIODE D4SBS6-F
D6522	8-719-083-60	DIODE UDZSTE-174.7B
D6523	8-719-988-61	DIODE 1SS355TE-17
D6524	8-719-988-61	DIODE 1SS355TE-17
D6525	8-719-988-61	DIODE 1SS355TE-17
D6526	8-719-988-61	DIODE 1SS355TE-17
D6527	8-719-988-61	DIODE 1SS355TE-17
D6534	8-719-018-84	DIODE D2S6MTA1
D6535	8-719-018-84	DIODE D2S6MTA1
D6537	8-719-018-84	DIODE D2S6MTA1
D6538	8-719-018-84	DIODE D2S6MTA1
D6539	8-719-988-61	DIODE 1SS355TE-17
D6540	8-719-988-61	DIODE 1SS355TE-17
D6701	8-719-068-00	DIODE ERC04-06SE
D6702	8-719-022-99	DIODE D6SB60L
D6703	8-719-068-00	DIODE ERC04-06SE
D6706	8-719-948-45	DIODE ERA22-08
D6712	6-500-158-01	DIODE 10ERA60-TA2B5
D6715	8-719-063-70	DIODE D1NL20U-TA2
D6716	8-719-988-61	DIODE 1SS355TE-17

FERRITE BEAD

REF. NO.	PART NO.	DESCRIPTION	VALUES
FB6503	1-410-396-41	FERRITE	0.45μH
FB6504	1-410-396-41	FERRITE	0.45μH
FB6505	1-410-397-21	FERRITE	1.1μH
FB6508	1-410-397-21	FERRITE	1.1μH
FB6509	1-410-396-41	FERRITE	0.45μH
FB6510	1-410-396-41	FERRITE	0.45μH
FB6511	1-410-396-41	FERRITE	0.45μH
FB6512	1-410-396-41	FERRITE	0.45μH
FB6703	1-410-396-41	FERRITE	0.45μH

IC

	REF. NO.	PART NO.	DESCRIPTION
	IC6501	8-759-394-35	IC BA12T
	IC6502	8-759-103-93	IC UPC393C
⚠	IC6503	8-749-012-13	IC DM-58
⚠	IC6504	8-759-198-31	IC UPC1093J-1-T
	IC6701	8-759-670-30	IC MCZ3001D

CHIP CONDUCTOR

REF. NO.	PART NO.	DESCRIPTION	VALUES
JR6502	1-216-295-91	SHORT CHIP	0
JR6503	1-216-295-91	SHORT CHIP	0
JR6504	1-216-295-91	SHORT CHIP	0
JR6505	1-216-295-91	SHORT CHIP	0
JR6506	1-216-295-91	SHORT CHIP	0
JR6507	1-216-295-91	SHORT CHIP	0
JR6508	1-216-295-91	SHORT CHIP	0
JR6509	1-216-295-91	SHORT CHIP	0
JR6511	1-216-295-91	SHORT CHIP	0
JR6512	1-216-295-91	SHORT CHIP	0
JR6513	1-216-295-91	SHORT CHIP	0

COIL

REF. NO.	PART NO.	DESCRIPTION	VALUES
L6501	1-406-661-21	INDUCTOR	22μH
L6504	1-412-529-11	INDUCTOR	22μH
L6505	1-412-529-11	INDUCTOR	22μH
L6506	1-412-525-31	INDUCTOR	10μH
L6507	1-412-525-31	INDUCTOR	10μH
L6509	1-412-529-11	INDUCTOR	22μH
L6511	1-412-529-11	INDUCTOR	22μH
L6512	1-412-533-21	INDUCTOR	47μH
L6513	1-412-533-21	INDUCTOR	47μH
L6514	1-406-665-11	INDUCTOR	100μH
L6515	1-406-659-11	INDUCTOR	10μH
L6517	1-414-189-31	INDUCTOR	100μH
L6518	1-412-524-11	INDUCTOR	8.2μH

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies par un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

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	REF. NO.	PART NO.	DESCRIPTION	VALUES
	L6519	1-412-524-11	INDUCTOR	8.2μH
	L6520	1-414-158-11	INDUCTOR	2.2μH
	L6521	1-414-158-11	INDUCTOR	2.2μH
	L6701	1-424-862-11	INDUCTOR	33μH

PHOTO COUPLER

	REF. NO.	PART NO.	DESCRIPTION	VALUES
⚠	PH6001	8-749-924-35	PHOTO COUPLER	ON3171-R
⚠	PH6002	8-749-924-35	PHOTO COUPLER	ON3171-R

IC LINK

	REF. NO.	PART NO.	DESCRIPTION
⚠	PS6501	1-533-597-41	LINK, IC
⚠	PS6502	1-533-597-41	LINK, IC
⚠	PS6503	1-533-597-31	LINK, IC
⚠	PS6504	1-533-597-31	LINK, IC
⚠	PS6505	1-533-597-31	LINK, IC
⚠	PS6506	1-533-597-31	LINK, IC
⚠	PS6507	1-533-282-21	LINK, IC
	PS6508	1-533-597-31	LINK, IC
	PS6509	1-533-597-31	LINK, IC

TRANSISTOR

REF. NO.	PART NO.	DESCRIPTION
Q6502	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR
Q6503	8-729-050-50	TRANSISTOR 2SD1782K-T146-R
Q6504	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR
Q6701	8-729-052-32	TRANSISTOR IRFIB7N50A-LF31
Q6702	8-729-052-32	TRANSISTOR IRFIB7N50A-LF31

RESISTOR

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	R6501	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R6505	1-215-900-11	METAL OXIDE	22K	5%	2W
	R6506	1-216-361-00	METAL OXIDE	0.22	5%	2W
	R6507	1-216-073-91	RES-CHIP	10K	5%	1/10W
	R6508	1-216-375-00	METAL OXIDE	3.3	5%	2W
	R6510	1-216-821-11	RES-CHIP	1K	5%	1/10W
	R6511	1-216-824-11	RES-CHIP	1.8K	5%	1/10W
	R6512	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R6513	1-216-295-91	SHORT CHIP	0		
	R6514	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R6515	1-216-821-11	RES-CHIP	1K	5%	1/10W
⚠	R6516	1-218-740-11	METAL CHIP	100K	0.50%	1/16W
⚠	R6517	1-218-708-11	METAL CHIP	4.7K	0.50%	1/16W
⚠	R6518	1-249-415-11	CARBON	680	5%	1/4W
	R6519	1-218-708-11	METAL CHIP	4.7K	0.50%	1/16W
	R6520	1-218-690-11	METAL CHIP	820	0.50%	1/16W
	R6521	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R6523	1-216-821-11	RES-CHIP	1K	5%	1/10W
	R6524	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R6525	1-216-821-11	RES-CHIP	1K	5%	1/10W
	R6526	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R6527	1-216-837-11	RES-CHIP	22K	5%	1/10W
	R6528	1-216-837-11	RES-CHIP	22K	5%	1/10W
⚠	R6535	1-218-740-11	METAL CHIP	100K	0.50%	1/16W
⚠	R6536	1-218-736-11	METAL CHIP	68K	0.50%	1/16W
	R6537	1-249-405-11	CARBON	100	5%	1/4W
	R6538	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
	R6539	1-218-708-11	METAL CHIP	4.7K	0.50%	1/16W
⚠	R6702	1-202-933-61	FUSIBLE	0.1	10%	1/2W
	R6703	1-260-131-11	CARBON	470K	5%	1/2W
	R6705	1-240-251-11	CEMENTED	6.8	5%	10W
	R6707	1-260-131-11	CARBON	470K	5%	1/2W
	R6709	1-260-328-11	CARBON	1K	5%	1/2W
	R6710	1-215-481-00	METAL	330K	1%	1/4W
	R6711	1-215-481-00	METAL	330K	1%	1/4W
⚠	R6712	1-249-417-11	CARBON	1K	5%	1/4W
⚠	R6713	1-249-393-11	CARBON	10	5%	1/4W
	R6714	1-215-481-00	METAL	330K	1%	1/4W
	R6715	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
	R6718	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R6721	1-218-715-11	METAL CHIP	9.1K	0.50%	1/16W
⚠	R6722	1-249-393-11	CARBON	10	5%	1/4W
	R6723	1-218-720-11	METAL CHIP	15K	0.50%	1/16W
	R6725	1-249-393-11	CARBON	10	5%	1/4W
	R6727	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R6728	1-243-979-71	METAL OXIDE	0.1	5%	2W
	R6729	1-243-979-71	METAL OXIDE	0.1	5%	2W
	R6730	1-218-668-11	METAL CHIP	100	0.50%	1/16W
	R6731	1-218-675-11	METAL CHIP	200	0.50%	1/16W
	R6732	1-216-813-11	RES-CHIP	220	5%	1/10W
	R6733	1-216-813-11	RES-CHIP	220	5%	1/10W

RELAY

	REF. NO.	PART NO.	DESCRIPTION
⚠	RY6701	1-755-395-11	RELAY (AC POWER)
⚠	RY6702	1-755-395-11	RELAY (AC POWER)

TRANSFORMER

	REF. NO.	PART NO.	DESCRIPTION
⚠	T6703	1-437-738-11	TRANSFORMER, CONVERTER (PIT)

AD

The AD board is not field repairable. If service is required, use the following part number to order a complete replacement board. Data is provided for reference only.

REF. NO.	PART NO.	DESCRIPTION	VALUES		
*	**A-1300-411-A**	**AD BOARD, COMPLETE**			
	CAPACITOR				
C9401	1-126-933-11	ELECT	100μF	20%	16V
C9402	1-126-933-11	ELECT	100μF	20%	16V
C9403	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9404	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C9405	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9406	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9407	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9408	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C9409	1-126-933-11	ELECT	100μF	20%	16V
C9410	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9411	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C9413	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9414	1-126-933-11	ELECT	100μF	20%	16V
C9415	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9416	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9419	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9422	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9424	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9425	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9426	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9427	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9428	1-126-933-11	ELECT	100μF	20%	16V
C9429	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9430	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9431	1-126-963-11	ELECT	4.7μF	20%	50V
C9432	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C9433	1-126-933-11	ELECT	100μF	20%	16V
C9434	1-126-933-11	ELECT	100μF	20%	16V
C9440	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C9441	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C9442	1-115-412-11	CERAMIC CHIP	680pF	5%	25V
C9444	1-115-412-11	CERAMIC CHIP	680pF	5%	25V
C9446	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9447	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9448	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9450	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9452	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C9453	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C9454	1-162-910-11	CERAMIC CHIP	5pF	0.25pF	50V
C9458	1-162-910-11	CERAMIC CHIP	5pF	0.25pF	50V
C9459	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9460	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9461	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9462	1-126-933-11	ELECT	100μF	20%	16V
C9463	1-126-933-11	ELECT	100μF	20%	16V
C9464	1-126-933-11	ELECT	100μF	20%	16V
C9465	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9466	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9467	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9468	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C9469	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C9470	1-115-412-11	CERAMIC CHIP	680pF	5%	25V
C9471	1-126-947-11	ELECT	47μF	20%	25V
C9472	1-115-412-11	CERAMIC CHIP	680pF	5%	25V
C9474	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9475	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9476	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9478	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9480	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C9481	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C9482	1-162-910-11	CERAMIC CHIP	5pF	0.25pF	50V
C9483	1-162-910-11	CERAMIC CHIP	5pF	0.25pF	50V
C9484	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9485	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9486	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9488	1-126-933-11	ELECT	100μF	20%	16V
C9489	1-126-933-11	ELECT	100μF	20%	16V
C9490	1-126-933-11	ELECT	100μF	20%	16V
C9491	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9492	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9493	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9494	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9495	1-162-968-11	CERAMIC CHIP	0.0047μF	10%	50V
C9498	1-126-933-11	ELECT	100μF	20%	16V
C9501	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C9502	1-115-412-11	CERAMIC CHIP	680pF	5%	25V
C9503	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C9505	1-115-412-11	CERAMIC CHIP	680pF	5%	25V
C9506	1-164-156-11	CERAMIC CHIP	0.1μF		25V

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C9508	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C9509	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C9511	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C9512	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C9514	1-162-910-11	CERAMIC CHIP	5pF	0.25pF	50V
C9515	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C9516	1-162-910-11	CERAMIC CHIP	5pF	0.25pF	50V
C9517	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C9518	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C9520	1-164-173-11	CERAMIC CHIP	0.0039µF	10%	50V
C9521	1-164-173-11	CERAMIC CHIP	0.0039µF	10%	50V
C9523	1-164-173-11	CERAMIC CHIP	0.0039µF	10%	50V
C9524	1-164-173-11	CERAMIC CHIP	0.0039µF	10%	50V
C9525	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C9526	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C9527	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C9528	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C9531	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C9532	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C9540	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C9541	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C9542	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C9543	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C9546	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C9547	1-164-392-11	CERAMIC CHIP	390pF	5%	50V
C9548	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C9549	1-115-416-11	CERAMIC CHIP	0.001µF	5%	25V
C9550	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C9552	1-162-974-11	CERAMIC CHIP	0.01µF		50V
C9553	1-126-947-11	ELECT	47µF	20%	25V
C9554	1-126-947-11	ELECT	47µF	20%	25V
C9555	1-126-947-11	ELECT	47µF	20%	25V
C9556	1-126-916-11	ELECT	1000µF	20%	6.3V
C9557	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C9558	1-126-933-11	ELECT	100µF	20%	16V
C9559	1-164-156-11	CERAMIC CHIP	0.1µF		25V

CONNECTOR

REF. NO.	PART NO.	DESCRIPTION	VALUES
CN9400	1-573-301-21	CONNECTOR, BOARD TO BOARD	20P
CN9401	1-573-301-21	CONNECTOR, BOARD TO BOARD	20P
* CN9402	1-564-511-11	PLUG,CONNEC2TOR	8P

DIODE

REF. NO.	PART NO.	DESCRIPTION	VALUES
D9400	8-719-988-61	DIODE 1SS355TE-17	
D9401	8-719-988-61	DIODE 1SS355TE-17	
D9402	8-719-988-61	DIODE 1SS355TE-17	
D9404	8-719-988-61	DIODE 1SS355TE-17	
D9405	8-719-988-61	DIODE 1SS355TE-17	
D9406	8-719-069-54	DIODE UDZSTE-175.1B	
D9407	8-719-069-54	DIODE UDZSTE-175.1B	
D9408	8-719-069-54	DIODE UDZSTE-175.1B	
D9409	8-719-069-54	DIODE UDZSTE-175.1B	

FERRITE BEAD

REF. NO.	PART NO.	DESCRIPTION	VALUES
FB9401	1-414-445-11	FERRITE	0µH
FB9402	1-414-445-11	FERRITE	0µH
FB9403	1-414-445-11	FERRITE	0µH
FB9404	1-414-445-11	FERRITE	0µH
FB9405	1-414-445-11	FERRITE	0µH
FB9406	1-414-445-11	FERRITE	0µH
FB9407	1-414-445-11	FERRITE	0µH
FB9408	1-414-445-11	FERRITE	0µH
FB9409	1-414-445-11	FERRITE	0µH
FB9410	1-414-445-11	FERRITE	0µH
FB9411	1-414-445-11	FERRITE	0µH
FB9412	1-414-445-11	FERRITE	0µH
FB9413	1-414-445-11	FERRITE	0µH
FB9414	1-414-445-11	FERRITE	0µH
FB9415	1-414-445-11	FERRITE	0µH
FB9416	1-414-445-11	FERRITE	0µH
FB9417	1-414-445-11	FERRITE	0µH

IC

REF. NO.	PART NO.	DESCRIPTION	VALUES
IC9400	8-752-932-80	IC CXP86460-645Q	
IC9401	8-759-683-55	IC CM0017AF	
IC9402	6-700-319-01	IC M24128-BWMN6T	
IC9403	8-759-352-91	IC PST9143NL	
IC9405	8-759-830-08	IC NJM2068V-TE2	
IC9406	8-759-830-08	IC NJM2068V-TE2	
IC9407	8-759-829-87	IC CD0031AM	
IC9408	8-759-830-08	IC NJM2068V-TE2	
IC9409	8-759-830-08	IC NJM2068V-TE2	
IC9410	8-759-830-08	IC NJM2068V-TE2	
IC9411	8-759-830-08	IC NJM2068V-TE2	
IC9413	8-759-278-58	IC NJM4558V-TE2	
IC9414	8-759-278-58	IC NJM4558V-TE2	

REF. NO.	PART NO.	DESCRIPTION	VALUES		
IC9415	8-759-278-58	IC NJM4558V-TE2			
IC9416	8-759-278-58	IC NJM4558V-TE2			
IC9420	8-759-830-08	IC NJM2068V-TE2			
IC9422	8-759-641-26	IC NJM2391DL1-33(TE1)			

COIL

REF. NO.	PART NO.	DESCRIPTION	VALUES		
L9401	1-469-555-21	INDUCTOR	10μH		

TRANSISTOR

REF. NO.	PART NO.	DESCRIPTION	VALUES		
Q9400	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR			
Q9401	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR			
Q9402	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR			
Q9403	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q9405	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q9406	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q9407	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q9408	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q9411	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q9412	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q9413	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q9414	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q9415	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR			
Q9416	8-729-028-28	TRANSISTOR 2SK2036(TE85L)			
Q9417	8-729-028-28	TRANSISTOR 2SK2036(TE85L)			

RESISTOR

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R9400	1-216-841-11	RES-CHIP	47K	5%	1/10W
R9401	1-216-809-11	RES-CHIP	100	5%	1/10W
R9402	1-216-833-11	RES-CHIP	10K	5%	1/10W
R9403	1-216-864-11	SHORT CHIP	0		
R9404	1-216-833-11	RES-CHIP	10K	5%	1/10W
R9405	1-216-821-11	RES-CHIP	1K	5%	1/10W
R9406	1-216-837-11	RES-CHIP	22K	5%	1/10W
R9407	1-216-821-11	RES-CHIP	1K	5%	1/10W
R9408	1-216-821-11	RES-CHIP	1K	5%	1/10W
R9410	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R9411	1-216-809-11	RES-CHIP	100	5%	1/10W
R9412	1-216-823-11	RES-CHIP	1.5K	5%	1/10W
R9413	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R9414	1-216-823-11	RES-CHIP	1.5K	5%	1/10W
R9415	1-216-821-11	RES-CHIP	1K	5%	1/10W
R9416	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R9417	1-216-809-11	RES-CHIP	100	5%	1/10W
R9418	1-216-809-11	RES-CHIP	100	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R9419	1-216-839-11	RES-CHIP	33K	5%	1/10W
R9420	1-216-821-11	RES-CHIP	1K	5%	1/10W
R9421	1-216-821-11	RES-CHIP	1K	5%	1/10W
R9422	1-216-818-11	RES-CHIP	560	5%	1/10W
R9423	1-216-809-11	RES-CHIP	100	5%	1/10W
R9424	1-216-809-11	RES-CHIP	100	5%	1/10W
R9425	1-216-833-11	RES-CHIP	10K	5%	1/10W
R9426	1-216-821-11	RES-CHIP	1K	5%	1/10W
R9428	1-216-809-11	RES-CHIP	100	5%	1/10W
R9429	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R9430	1-216-821-11	RES-CHIP	1K	5%	1/10W
R9431	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R9432	1-216-815-11	RES-CHIP	330	5%	1/10W
R9433	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R9434	1-216-833-11	RES-CHIP	10K	5%	1/10W
R9435	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R9436	1-216-809-11	RES-CHIP	100	5%	1/10W
R9437	1-216-809-11	RES-CHIP	100	5%	1/10W
R9438	1-216-815-11	RES-CHIP	330	5%	1/10W
R9439	1-216-815-11	RES-CHIP	330	5%	1/10W
R9440	1-216-817-11	RES-CHIP	470	5%	1/10W
R9441	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R9442	1-218-700-11	METAL CHIP	2.2K	0.50%	1/16W
R9443	1-218-692-11	METAL CHIP	1K	0.50%	1/16W
R9444	1-216-837-11	RES-CHIP	22K	5%	1/10W
R9446	1-216-821-11	RES-CHIP	1K	5%	1/10W
R9447	1-216-821-11	RES-CHIP	1K	5%	1/10W
R9448	1-216-818-11	RES-CHIP	560	5%	1/10W
R9449	1-216-823-11	RES-CHIP	1.5K	5%	1/10W
R9450	1-216-823-11	RES-CHIP	1.5K	5%	1/10W
R9451	1-218-700-11	METAL CHIP	2.2K	0.50%	1/16W
R9452	1-218-700-11	METAL CHIP	2.2K	0.50%	1/16W
R9453	1-216-833-11	RES-CHIP	10K	5%	1/10W
R9454	1-218-700-11	METAL CHIP	2.2K	0.50%	1/16W
R9455	1-218-700-11	METAL CHIP	2.2K	0.50%	1/16
R9456	1-216-833-11	RES-CHIP	10K	5%	1/10W
R9457	1-216-833-11	RES-CHIP	10K	5%	1/10W
R9458	1-216-839-11	RES-CHIP	33K	5%	1/10W
R9459	1-218-724-11	METAL CHIP	22K	0.50%	1/16W
R9460	1-218-724-11	METAL CHIP	22K	0.50%	1/16W
R9461	1-218-724-11	METAL CHIP	22K	0.50%	1/16W
R9462	1-218-724-11	METAL CHIP	22K	0.50%	1/16W
R9463	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R9464	1-218-716-11	METAL CHIP	10K	0.50%	1/16W

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R9465	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R9466	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R9467	1-218-700-11	METAL CHIP	2.2K	0.50%	1/16W
R9468	1-218-700-11	METAL CHIP	2.2K	0.50%	1/16W
R9469	1-218-700-11	METAL CHIP	2.2K	0.50%	1/16W
R9470	1-218-700-11	METAL CHIP	2.2K	0.50%	1/16W
R9471	1-218-724-11	METAL CHIP	22K	0.50%	1/16W
R9472	1-218-724-11	METAL CHIP	22K	0.50%	1/16W
R9473	1-218-724-11	METAL CHIP	22K	0.50%	1/16W
R9474	1-218-724-11	METAL CHIP	22K	0.50%	1/16W
R9475	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R9476	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R9477	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R9478	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R9479	1-218-700-11	METAL CHIP	2.2K	0.50%	1/16W
R9480	1-218-700-11	METAL CHIP	2.2K	0.50%	1/16W
R9481	1-218-700-11	METAL CHIP	2.2K	0.50%	1/16W
R9482	1-218-700-11	METAL CHIP	2.2K	0.50%	1/16W
R9483	1-218-724-11	METAL CHIP	22K	0.50%	1/16W
R9484	1-218-724-11	METAL CHIP	22K	0.50%	1/16W
R9485	1-218-724-11	METAL CHIP	22K	0.50%	1/16W
R9486	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R9487	1-218-724-11	METAL CHIP	22K	0.50%	1/16W
R9488	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R9489	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R9490	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R9494	1-216-855-11	RES-CHIP	680K	5%	1/10W
R9495	1-216-853-11	RES-CHIP	470K	5%	1/10W
R9496	1-216-853-11	RES-CHIP	470K	5%	1/10W
R9497	1-216-855-11	RES-CHIP	680K	5%	1/10W
R9502	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R9503	1-216-845-11	RES-CHIP	100K	5%	1/10W
R9504	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R9505	1-216-843-11	RES-CHIP	68K	5%	1/10W
R9509	1-216-843-11	RES-CHIP	68K	5%	1/10W
R9510	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R9511	1-216-845-11	RES-CHIP	100K	5%	1/10W
R9512	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R9515	1-216-821-11	RES-CHIP	1K	5%	1/10W
R9516	1-216-821-11	RES-CHIP	1K	5%	1/10W
R9520	1-216-821-11	RES-CHIP	1K	5%	1/10W
R9527	1-216-821-11	RES-CHIP	1K	5%	1/10W
R9539	1-218-706-11	METAL CHIP	3.9K	0.50%	1/16W
R9540	1-218-702-11	METAL CHIP	2.7K	0.50%	1/16W

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R9541	1-216-827-11	RES-CHIP	3.3K	5%	1/10W
R9542	1-218-714-11	METAL CHIP	8.2K	0.50%	1/16W
R9545	1-216-839-11	RES-CHIP	33K	5%	1/10W
R9546	1-218-720-11	METAL CHIP	15K	0.50%	1/16W
R9548	1-218-740-11	METAL CHIP	100K	0.50%	1/16W
R9549	1-218-722-11	METAL CHIP	18K	0.50%	1/16W
R9550	1-216-837-11	RES-CHIP	22K	5%	1/10W
R9551	1-216-809-11	RES-CHIP	100	5%	1/10W
R9553	1-216-821-11	RES-CHIP	1K	5%	1/10W
R9554	1-216-821-11	RES-CHIP	1K	5%	1/10W
R9555	1-216-833-11	RES-CHIP	10K	5%	1/10W
R9556	1-216-821-11	RES-CHIP	1K	5%	1/10W
R9557	1-216-821-11	RES-CHIP	1K	5%	1/10W
R9558	1-216-821-11	RES-CHIP	1K	5%	1/10W
R9559	1-216-821-11	RES-CHIP	1K	5%	1/10W
R9565	1-216-833-11	RES-CHIP	10K	5%	1/10W
R9566	1-216-833-11	RES-CHIP	10K	5%	1/10W
R9567	1-216-833-11	RES-CHIP	10K	5%	1/10W
R9568	1-216-864-11	SHORT CHIP	0		
R9569	1-216-864-11	SHORT CHIP	0		
R9570	1-216-864-11	SHORT CHIP	0		
R9571	1-216-864-11	SHORT CHIP	0		
R9572	1-216-833-11	RES-CHIP	10K	5%	1/10W
R9573	1-216-833-11	RES-CHIP	10K	5%	1/10W
R9574	1-216-797-11	RES-CHIP	10	5%	1/10W
R9575	1-216-797-11	RES-CHIP	10	5%	1/10W

RESISTOR BRIDGE

RB9400	1-233-576-11	RES, CHIP NETWORK	100
RB9401	1-233-576-11	RES, CHIP NETWORK	100
RB9402	1-233-576-11	RES, CHIP NETWORK	100

VARISTOR

VD9404	1-804-499-21	VARISTOR, CHIP
VD9405	1-804-499-21	VARISTOR, CHIP
VD9406	1-804-499-21	VARISTOR, CHIP
VD9407	1-804-499-21	VARISTOR, CHIP

CRYSTAL

X9401	1-767-922-11	VIBRATOR, CERAMIC

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

D

	REF. NO.	PART NO.	DESCRIPTION
⚠	*	A-1300-560-A	D BOARD, COMPLETE
		4-382-854-11	SCREW (M3X10), P, SW (+)
		7-682-952-09	SCREW#NAME? 3X16

The high-voltage leads associated with the FBT on the D board are not included and must be ordered separately. Order the following leads when requesting this D board:

	REF. NO.	PART NO.	DESCRIPTION
⚠		1-779-095-51	HV LEAD ASSY
⚠		1-900-260-40	CONNECTOR ASSY., MV

CAPACITOR

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C8001	1-164-227-11	CERAMIC CHIP	0.022μF	10%	25V
C8002	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C8003	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C8004	1-104-666-11	ELECT	220μF	20%	25V
C8005	1-126-942-61	ELECT	1000μF	20%	25V
C8006	1-126-942-61	ELECT	1000μF	20%	25V
C8007	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C8008	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C8009	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C8010	1-136-177-00	FILM	1μF	5%	50V
C8011	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C8012	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C8013	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C8014	1-104-665-11	ELECT	100μF	20%	25V
C8015	1-126-969-11	ELECT	220μF	20%	50V
C8016	1-104-665-11	ELECT	100μF	20%	25V
C8017	1-162-964-11	CERAMIC CHIP	0.001μF	10%	50V
C8018	1-126-964-11	ELECT	10μF	20%	50V
C8019	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C8020	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C8023	1-106-220-00	MYLAR	0.1μF	10%	100V
C8024	1-164-227-11	CERAMIC CHIP	0.022μF	10%	25V
C8025	1-126-968-11	ELECT	100μF	20%	50V
C8026	1-126-968-11	ELECT	100μF	20%	50V
C8028	1-126-968-11	ELECT	100μF	20%	50V
C8029	1-126-968-11	ELECT	100μF	20%	50V
C8031	1-107-636-11	ELECT	10μF	20%	160V
C8032	1-126-968-11	ELECT	100μF	20%	50V
C8033	1-126-968-11	ELECT	100μF	20%	50V
C8034	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C8035	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C8036	1-126-968-11	ELECT	100μF	20%	50V
C8037	1-126-968-11	ELECT	100μF	20%	50V
C8040	1-115-349-51	CERAMIC	0.01μF		2KV
C8041	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C8042	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C8045	1-126-965-91	ELECT	22μF	20%	50V
C8046	1-126-965-91	ELECT	22μF	20%	50V
C8047	1-162-974-11	CERAMIC CHIP	0.01μF		50V
C8048	1-126-965-91	ELECT	22μF	20%	50V
C8049	1-162-974-11	CERAMIC CHIP	0.01μF		50V
C8050	1-126-965-91	ELECT	22μF	20%	50V
C8051	1-102-038-00	CERAMIC	0.001μF		500V
C8052	1-126-965-91	ELECT	22μF	20%	50V
C8053	1-162-974-11	CERAMIC CHIP	0.01μF		50V
C8054	1-162-974-11	CERAMIC CHIP	0.01μF		50V
C8055	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C8056	1-107-652-11	ELECT	10μF	20%	250V
C8057	1-126-959-11	ELECT	0.47μF	20%	50V
C8058	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C8059	1-127-715-91	CERAMIC CHIP	0.22μF	10%	16V
C8060	1-104-665-11	ELECT	100μF	20%	25V
C8061	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C8062	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C8063	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C8064	1-107-636-11	ELECT	10μF	20%	160V
C8065	1-106-383-00	MYLAR	0.047μF	10%	200V
C8066	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C8067	1-104-665-11	ELECT	100μF	20%	25V
C8068	1-162-318-11	CERAMIC	0.001μF	10%	500V
C8069	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C8070	1-126-964-11	ELECT	10μF	20%	50V
C8071	1-126-964-11	ELECT	10μF	20%	50V
C8072	1-126-964-11	ELECT	10μF	20%	50V
C8073	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C8074	1-104-665-11	ELECT	100μF	20%	25V
C8075	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C8076	1-128-551-11	ELECT	22μF	20%	25V
C8077	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C8078	1-115-416-11	CERAMIC CHIP	0.001μF	5%	25V
C8079	1-126-964-11	ELECT	10μF	20%	50V
C8080	1-126-964-11	ELECT	10μF	20%	50V
C8081	1-115-416-11	CERAMIC CHIP	0.001μF	5%	25V
C8082	1-165-176-11	CERAMIC CHIP	0.047μF	10%	16V

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	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	C8083	1-130-495-00	MYLAR	0.1µF	5%	50V
	C8084	1-130-992-11	FILM	0.022µF	5%	50V
	C8085	1-162-924-11	CERAMIC CHIP	56pF	5%	50V
	C8086	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
	C8087	1-126-960-11	ELECT	1µF	20%	50V
	C8088	1-126-964-11	ELECT	10µF	20%	50V
	C8089	1-162-134-11	CERAMIC	470pF	10%	2KV
	C8090	1-126-960-11	ELECT	1µF	20%	50V
	C8091	1-104-665-11	ELECT	100µF	20%	25V
	C8092	1-117-640-11	FILM	6800pF	3%	1.2KV
	C8093	1-107-648-91	ELECT	100µF	20%	160V
	C8094	1-126-947-11	ELECT	47µF	20%	25V
	C8095	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
	C8096	1-136-684-51	MYLAR	0.0022µF	10%	100V
	C8097	1-162-131-11	CERAMIC	220pF	10%	2KV
	C8098	1-162-131-11	CERAMIC	220pF	10%	2KV
	C8099	1-115-416-11	CERAMIC CHIP	0.001µF	5%	25V
	C8100	1-104-665-11	ELECT	100µF	20%	25V
	C8102	1-162-318-11	CERAMIC	0.001µF	10%	500V
	C8103	1-126-964-11	ELECT	10µF	20%	50V
	C8104	1-162-965-11	CERAMIC CHIP	0.0015µF	10%	50V
	C8105	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
	C8106	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
	C8107	1-136-187-11	MYLAR	0.047µF	10%	250V
	C8108	1-126-964-11	ELECT	10µF	20%	50V
	C8109	1-162-924-11	CERAMIC CHIP	56pF	5%	50V
	C8110	1-126-960-11	ELECT	1µF	20%	50V
	C8111	1-126-960-11	ELECT	1µF	20%	50V
	C8113	1-130-495-00	MYLAR	0.1µF	5%	50V
	C8114	1-125-473-11	ELECT(BLOCK)	1000µF	20%	160V
	C8115	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
	C8116	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
	C8117	1-162-318-11	CERAMIC	0.001µF	10%	500V
	C8118	1-136-189-00	MYLAR	0.1µF	10%	250V
	C8120	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
	C8121	1-115-349-51	CERAMIC	0.01µF		2KV
	C8122	1-126-934-11	ELECT	220µF	20%	16V
	C8123	1-107-444-11	CERAMIC	100pF	10%	2KV
⚠	C8124	1-117-642-11	FILM	8200pF	3%	1.2KV
	C8125	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
	C8126	1-106-357-00	MYLAR	0.0039µF	20%	200V
	C8127	1-126-942-61	ELECT	1000µF	20%	25V
	C8129	1-137-150-11	MYLAR	0.01µF	5%	50V
	C8131	1-128-582-11	ELECT	10µF	20%	100V

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	C8132	1-126-927-11	ELECT	2200µF	20%	10V
	C8133	1-107-649-11	ELECT	2.2µF	20%	250V
	C8135	1-117-813-11	FILM	0.75µF	5%	250V
	C8136	1-130-495-00	MYLAR	0.1µF	5%	50V
	C8137	1-126-927-11	ELECT	2200µF	20%	10V
	C8138	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
	C8139	1-126-964-11	ELECT	10µF	20%	50V
	C8140	1-102-030-00	CERAMIC	330pF	10%	500V
	C8141	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
	C8142	1-117-664-11	FILM	0.27µF	5%	250V
	C8143	1-109-889-11	ELECT	1µF	20%	50V
	C8145	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
	C8146	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
	C8153	1-126-960-11	ELECT	1µF	20%	50V
	C8154	1-126-947-11	ELECT	47µF	20%	16V
	C8155	1-126-947-11	ELECT	47µF	20%	16V
	C8156	1-107-636-11	ELECT	10µF	20%	160V
	C8158	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
	C8159	1-106-383-00	MYLAR	0.047µF	10%	200V
	C8160	1-127-715-91	CERAMIC CHIP	0.22µF	10%	16V
	C8162	1-162-318-11	CERAMIC	0.001µF	10%	500V
	C8163	1-126-960-11	ELECT	1µF	20%	50V
	C8165	1-126-965-91	ELECT	22µF	20%	50V

CONNECTOR

	REF. NO.	PART NO.	DESCRIPTION	VALUES
*	CN8003	1-691-135-11	PIN,CONNECTOR (PC BOARD)	4P
*	CN8006	1-564-506-11	PLUG,CONNECTOR	3P
*	CN8007	1-564-506-11	PLUG,CONNECTOR	3P
*	CN8008	1-564-506-11	PLUG,CONNECTOR	3P
*	CN8009	1-564-506-11	PLUG,CONNECTOR	3P
*	CN8010	1-564-507-11	PLUG,CONNECTOR	4P
*	CN8011	1-564-507-11	PLUG,CONNECTOR	4P
*	CN8012	1-564-507-11	PLUG,CONNECTOR	4P
	CN8013	1-779-092-11	PIN,CONNECTOR (PC BOARD)	10P
*	CN8015	1-506-371-00	PIN,CONNECTOR	2P
*	CN8016	1-564-507-11	PLUG,CONNECTOR	4P
*	CN8018	1-580-689-11	PIN,CONNECTOR (PC BOARD)	4P
*	CN8019	1-580-689-11	PIN,CONNECTOR (PC BOARD)	4P
*	CN8020	1-580-689-11	PIN,CONNECTOR (PC BOARD)	4P
*	CN8022	1-564-510-11	PLUG,CONNECTOR	7P
*	CN8023	1-564-507-11	PLUG,CONNECTOR	4P
*	CN8025	1-779-890-11	CONNECTOR, BOARD TO BOARD	10P
	CN8026	1-573-298-21	CONNECTOR, BOARD TO BOARD	20P
	CN8027	1-573-298-21	CONNECTOR, BOARD TO BOARD	20P

	REF. NO.	PART NO.	DESCRIPTION	VALUES
*	CN8028	1-564-507-11	PLUG,CONNECTOR	4P
*	CN8029	1-564-510-11	PLUG,CONNECTOR	7P
*	CN8030	1-564-510-11	PLUG,CONNECTOR	7P
*	CN8031	1-779-890-11	CONNECTOR, BOARD TO BOARD	10P
		DIODE		
	D8001	8-719-109-89	DIODE MTZJ-T-77-5.6B	
	D8002	8-719-110-53	DIODE MTZJ-T-77-20B	
	D8003	8-719-924-13	DIODE MTZJ-T-77-22B	
	D8004	8-719-908-03	DIODE GP08DPKG23	
	D8005	8-719-988-61	DIODE 1SS355TE-17	
	D8006	8-719-988-61	DIODE 1SS355TE-17	
	D8008	8-719-988-61	DIODE 1SS355TE-17	
	D8010	8-719-988-61	DIODE 1SS355TE-17	
	D8011	8-719-988-61	DIODE 1SS355TE-17	
	D8012	8-719-988-61	DIODE 1SS355TE-17	
	D8013	8-719-109-85	DIODE MTZJ-T-77-5.1B	
	D8014	8-719-109-85	DIODE MTZJ-T-77-5.1B	
	D8015	8-719-988-61	DIODE 1SS355TE-17	
	D8016	8-719-988-61	DIODE 1SS355TE-17	
	D8019	8-719-988-61	DIODE 1SS355TE-17	
	D8020	8-719-988-61	DIODE 1SS355TE-17	
	D8022	8-719-988-61	DIODE 1SS355TE-17	
	D8023	8-719-988-61	DIODE 1SS355TE-17	
	D8024	8-719-110-41	DIODE MTZJ-T-77-15B	
	D8025	8-719-988-61	DIODE 1SS355TE-17	
	D8026	8-719-109-89	DIODE MTZJ-T-77-5.6B	
	D8027	8-719-028-45	DIODE D2L20U-TA	
	D8028	8-719-110-41	DIODE MTZJ-T-77-15B	
	D8029	8-719-027-43	DIODE S2L20µF	
	D8030	8-719-027-43	DIODE S2L20µF	
	D8032	8-719-302-43	DIODE RGP10GPKG23	
	D8033	8-719-028-72	DIODE RGP02-17EL-6433	
	D8036	8-719-110-41	DIODE MTZJ-T-77-15B	
	D8037	8-719-028-45	DIODE D2L20U-F	
	D8038	8-719-302-43	DIODE RGP10GPKG23	
	D8039	8-719-028-72	DIODE RGP02-17PKG23	
	D8042	8-719-988-61	DIODE 1SS355TE-17	
	D8043	8-719-988-61	DIODE 1SS355TE-17	
	D8045	8-719-908-03	DIODE GP08DPKG23	
	D8047	8-719-988-61	DIODE 1SS355TE-17	
	D8050	8-719-988-61	DIODE 1SS355TE-17	
	D8051	8-719-988-61	DIODE 1SS355TE-17	
	D8052	8-719-988-61	DIODE 1SS355TE-17	

REF. NO.	PART NO.	DESCRIPTION	VALUES
	FERRITE BEAD		
FB8001	1-410-397-21	FERRITE	1.1µH
FB8002	1-410-397-21	FERRITE	1.1µH
FB8005	1-469-869-21	FERRITE	0µH
FB8006	1-469-869-21	FERRITE	0µH
FB8014	1-469-869-21	FERRITE	0µH
FB8015	1-469-869-21	FERRITE	0µH
FB8016	1-469-869-21	FERRITE	0µH
FB8017	1-469-869-21	FERRITE	0µH
FB8018	1-469-869-21	FERRITE	0µH
FB8021	1-410-397-21	FERRITE	1.1µH
FB8022	1-410-396-41	FERRITE	0.45µH
FB8023	1-410-396-41	FERRITE	0.45µH
	IC		
IC8001	8-749-019-08	IC STK392-560	
IC8002	8-749-019-08	IC STK392-560	
IC8003	8-759-593-33	IC LA78045	
IC8004	8-759-701-79	IC NJM7812FA	
IC8005	8-759-585-82	IC BA9759F-E2	
IC8006	8-759-700-07	IC NJM2903M-TE2	
IC8007	8-759-700-07	IC NJM2903M-TE2	
IC8008	8-759-585-82	IC BA9759F-E2	
IC8009	8-759-803-42	IC LA6500P-FA	
IC8010	8-759-471-81	IC PQ05RD11	
IC8012	8-759-701-01	IC NJM2904M(TE2)	
	COIL		
L8001	1-412-533-21	INDUCTOR	47µH
L8002	1-412-533-21	INDUCTOR	47µH
L8003	1-412-525-31	INDUCTOR	10µH
L8004	1-412-533-21	INDUCTOR	47µH
L8005	1-412-533-21	INDUCTOR	47µH
L8006	1-412-525-31	INDUCTOR	10µH
L8007	1-412-533-21	INDUCTOR	47µH
L8008	1-412-533-21	INDUCTOR	47µH
L8009	1-412-525-31	INDUCTOR	10µH
L8010	1-414-187-11	INDUCTOR	47µH
L8011	1-414-856-11	INDUCTOR	10µH
L8012	1-414-187-11	INDUCTOR	47µH
L8013	1-414-856-11	INDUCTOR	10µH
L8014	1-414-189-31	INDUCTOR	100µH
L8015	1-414-189-31	INDUCTOR	100µH

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REF. NO.	PART NO.	DESCRIPTION	VALUES
L8016	1-412-537-31	INDUCTOR	100μH
L8017	1-414-856-11	INDUCTOR	10μH
L8018	1-406-667-11	INDUCTOR	220μH
L8019	1-456-109-11	COIL,HORIZONTAL LINEARITY(HLC)	
L8020	1-412-525-31	INDUCTOR	10μH
L8021	1-406-659-11	INDUCTOR	10μH
L8022	1-412-552-11	INDUCTOR	2.2MH
L8025	1-414-856-11	INDUCTOR	10μH
L8026	1-414-856-11	INDUCTOR	10μH
L8028	1-414-187-11	INDUCTOR	47μH
L8029	1-414-187-11	INDUCTOR	47μH
L8030	1-414-187-11	INDUCTOR	47μH
L8031	1-414-187-11	INDUCTOR	47μH
L8032	1-414-856-11	INDUCTOR	10μH
L8033	1-414-856-11	INDUCTOR	10μH

NEON LAMP

REF. NO.	PART NO.	DESCRIPTION	VALUES
NL8001	1-517-778-21	LAMP, NEON	

IC LINK

REF. NO.	PART NO.	DESCRIPTION	VALUES
⚠ PS8001	1-533-595-31	LINK, IC	
⚠ PS8002	1-533-595-31	LINK, IC	
⚠ PS8003	1-533-595-31	LINK, IC	
⚠ PS8004	1-533-595-31	LINK, IC	
⚠ PS8005	1-533-595-31	LINK, IC	
⚠ PS8006	1-533-595-31	LINK, IC	
⚠ PS8007	1-533-594-31	LINK, IC	
PS8008	1-532-685-00	LINK, IC	0.8A/150V

TRANSISTOR

REF. NO.	PART NO.	DESCRIPTION	VALUES
Q8001	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q8002	8-729-046-80	TRANSISTOR 2SC4634LS-CB11	
Q8003	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q8004	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q8007	8-729-046-80	TRANSISTOR 2SC4634LS-CB11	
Q8008	8-729-207-89	TRANSISTOR 2SA1358-Y	
Q8009	8-729-207-82	TRANSISTOR 2SC3421-Y	
Q8010	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q8011	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q8014	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q8015	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q8016	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q8019	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q8020	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q8021	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q8022	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q8023	8-729-048-47	TRANSISTOR 2SC2688(5)-LK	
Q8024	6-550-144-01	TRANSISTOR 2SC5778-YB	
Q8027	6-550-153-01	TRANSISTOR FQpF12P20XDTU	
Q8028	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q8029	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q8030	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q8031	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q8035	6-550-153-01	TRANSISTOR FQpF12P20XDTU	
Q8039	8-729-048-47	TRANSISTOR 2SC2688(5)-LK	
Q8041	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q8042	8-729-048-47	TRANSISTOR 2SC2688(5)-LK	
Q8043	6-550-144-01	TRANSISTOR 2SC5778-YB	
Q8044	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q8101	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	

RESISTOR

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R8001	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R8002	1-216-809-11	RES-CHIP	100	5%	1/10W
R8003	1-216-809-11	RES-CHIP	100	5%	1/10W
R8004	1-216-809-11	RES-CHIP	100	5%	1/10W
R8005	1-215-875-11	METAL OXIDE	10K	5%	1W
R8007	1-216-809-11	RES-CHIP	100	5%	1/10W
R8008	1-216-809-11	RES-CHIP	100	5%	1/10W
R8009	1-216-809-11	RES-CHIP	100	5%	1/10W
R8010	1-260-131-11	CARBON	470K	5%	1/2W
R8011	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R8012	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R8013	1-218-710-11	METAL CHIP	5.6K	0.50%	1/16W
R8014	1-218-710-11	METAL CHIP	5.6K	0.50%	1/16W
R8015	1-216-837-11	RES-CHIP	22K	5%	1/10W
R8016	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R8017	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R8018	1-216-821-11	RES-CHIP	1K	5%	1/10W
R8019	1-218-712-11	METAL CHIP	6.8K	0.50%	1/16W
R8020	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
⚠ R8021	1-216-833-11	RES-CHIP	10K	5%	1/10W
R8022	1-216-839-11	RES-CHIP	33K	5%	1/10W
R8023	1-216-833-11	RES-CHIP	10K	5%	1/10W
R8024	1-216-833-11	RES-CHIP	10K	5%	1/10W
R8025	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R8026	1-216-829-11	RES-CHIP	4.7K	5%	1/10W

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	R8029	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
	R8030	1-215-903-11	METAL OXIDE	68K	5%	2W
	R8031	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
	R8032	1-216-821-11	RES-CHIP	1K	5%	1/10W
	R8033	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R8034	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R8035	1-218-692-11	METAL CHIP	1K	0.50%	1/16W
	R8036	1-214-800-11	METAL	2.2	1%	1/2W
	R8037	1-215-903-11	METAL OXIDE	68K	5%	2W
	R8038	1-216-809-11	RES-CHIP	100	5%	1/10W
	R8039	1-214-800-11	METAL	2.2	1%	1/2W
	R8040	1-215-913-11	METAL OXIDE	220	5%	3W
	R8041	1-218-710-11	METAL CHIP	5.6K	0.50%	1/16W
	R8042	1-216-826-11	RES-CHIP	2.7K	5%	1/10W
	R8043	1-218-740-11	METAL CHIP	100K	0.50%	1/16W
	R8044	1-218-712-11	METAL CHIP	6.8K	0.50%	1/16W
	R8045	1-214-808-11	METAL	4.7	1%	1/2W
	R8046	1-214-808-11	METAL	4.7	1%	1/2W
	R8047	1-215-857-71	METAL OXIDE	10	5%	1W
	R8048	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R8050	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R8051	1-214-808-11	METAL	4.7	1%	1/2W
	R8053	1-214-808-11	METAL	4.7	1%	1/2W
	R8055	1-218-748-11	METAL CHIP	220K	0.50%	1/16W
	R8056	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
	R8057	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
	R8058	1-216-809-11	RES-CHIP	100	5%	1/10W
	R8059	1-214-808-11	METAL	4.7	1%	1/2W
	R8060	1-214-808-11	METAL	4.7	1%	1/2W
	R8061	1-216-392-11	METAL OXIDE	1.8	5%	3W
	R8062	1-260-107-11	CARBON	4.7K	5%	1/2W
	R8063	1-214-808-11	METAL	4.7	1%	1/2W
	R8064	1-214-808-11	METAL	4.7	1%	1/2W
	R8065	1-260-328-11	CARBON	1K	5%	1/2W
	R8066	1-214-808-11	METAL	4.7	1%	1/2W
	R8067	1-214-808-11	METAL	4.7	1%	1/2W
	R8068	1-216-809-11	RES-CHIP	100	5%	1/10W
	R8069	1-214-808-11	METAL	4.7	1%	1/2W
	R8070	1-214-808-11	METAL	4.7	1%	1/2W
	R8071	1-215-381-00	METAL	22	1%	1/4W
	R8073	1-214-808-11	METAL	4.7	1%	1/2W
	R8075	1-214-808-11	METAL	4.7	1%	1/2W
	R8076	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
	R8077	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
	R8078	1-214-808-11	METAL	4.7	1%	1/2W
	R8079	1-214-808-11	METAL	4.7	1%	1/2W
	R8080	1-216-353-00	METAL OXIDE	2.2	5%	1W
	R8081	1-214-808-11	METAL	4.7	1%	1/2W
	R8082	1-214-808-11	METAL	4.7	1%	1/2W
	R8083	1-216-821-11	RES-CHIP	1K	5%	1/10W
	R8084	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R8085	1-214-808-11	METAL	4.7	1%	1/2W
	R8086	1-214-808-11	METAL	4.7	1%	1/2W
⚠	R8087	1-249-385-11	CARBON	2.2	5%	1/4W
⚠	R8088	1-249-385-11	CARBON	2.2	5%	1/4W
	R8089	1-214-808-11	METAL	4.7	1%	1/2W
	R8090	1-214-808-11	METAL	4.7	1%	1/2W
	R8091	1-214-808-11	METAL	4.7	1%	1/2W
	R8092	1-214-808-11	METAL	4.7	1%	1/2W
	R8093	1-214-808-11	METAL	4.7	1%	1/2W
	R8094	1-214-808-11	METAL	4.7	1%	1/2W
	R8095	1-216-801-11	RES-CHIP	22	5%	1/10W
	R8096	1-216-801-11	RES-CHIP	22	5%	1/10W
	R8097	1-214-808-11	METAL	4.7	1%	1/2W
	R8098	1-214-808-11	METAL	4.7	1%	1/2W
	R8100	1-216-475-11	METAL OXIDE	120	5%	3W
	R8101	1-216-475-11	METAL OXIDE	120	5%	3W
	R8102	1-218-734-11	METAL CHIP	56K	0.50%	1/16W
	R8103	1-216-816-11	RES-CHIP	390	5%	1/10W
	R8104	1-216-828-11	RES-CHIP	3.9K	5%	1/10W
	R8105	1-214-808-11	METAL	4.7	1%	1/2W
	R8106	1-214-808-11	METAL	4.7	1%	1/2W
	R8109	1-216-813-11	RES-CHIP	220	5%	1/10W
	R8110	1-249-424-11	CARBON	3.9K	5%	1/4W
	R8111	1-216-819-11	RES-CHIP	680	5%	1/10W
	R8112	1-216-824-11	RES-CHIP	1.8K	5%	1/10W
	R8113	1-216-475-11	METAL OXIDE	120	5%	3W
	R8114	1-216-475-11	METAL OXIDE	120	5%	3W
	R8115	1-216-475-11	METAL OXIDE	120	5%	3W
	R8116	1-216-475-11	METAL OXIDE	120	5%	3W
	R8117	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R8118	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R8119	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R8120	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R8121	1-216-809-11	RES-CHIP	100	5%	1/10W
	R8123	1-216-821-11	RES-CHIP	1K	5%	1/10W
	R8124	1-249-377-11	CARBON	0.47	5%	1/4W
	R8125	1-216-816-11	RES-CHIP	390	5%	1/10W

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	R8126	1-216-823-11	RES-CHIP	1.5K	5%	1/10W
	R8127	1-216-341-11	METAL OXIDE	0.22	5%	1W
	R8128	1-216-845-11	RES-CHIP	100K	5%	1/10W
	R8129	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
	R8130	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
	R8131	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R8132	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R8133	1-215-923-00	METAL OXIDE	10K	5%	3W
	R8134	1-215-873-00	METAL OXIDE	4.7K	5%	1W
	R8135	1-215-923-00	METAL OXIDE	10K	5%	3W
	R8136	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R8137	1-218-740-11	METAL CHIP	100K	0.50%	1/16W
	R8138	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R8139	1-216-827-11	RES-CHIP	3.3K	5%	1/10W
	R8140	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R8141	1-216-827-11	RES-CHIP	3.3K	5%	1/10W
	R8142	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R8143	1-218-734-11	METAL CHIP	56K	0.50%	1/16W
	R8144	1-216-809-11	RES-CHIP	100	5%	1/10W
	R8145	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
	R8146	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
	R8147	1-218-710-11	METAL CHIP	5.6K	0.50%	1/16W
	R8148	1-218-740-11	METAL CHIP	100K	0.50%	1/16W
	R8149	1-249-401-11	CARBON	47	5%	1/4W
	R8150	1-218-740-11	METAL CHIP	100K	0.50%	1/16W
	R8151	1-218-692-11	METAL CHIP	1K	0.50%	1/16W
	R8152	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
	R8153	1-218-692-11	METAL CHIP	1K	0.50%	1/16W
	R8154	1-218-728-11	METAL CHIP	33K	0.50%	1/16W
	R8155	1-215-469-00	METAL	100K	1%	1/4W
	R8156	1-215-469-00	METAL	100K	1%	1/4W
	R8157	1-218-738-11	METAL CHIP	82K	0.50%	1/16W
	R8159	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R8161	1-216-845-11	RES-CHIP	100K	5%	1/10W
	R8162	1-249-377-11	CARBON	0.47	5%	1/4W
	R8163	1-216-845-11	RES-CHIP	100K	5%	1/10W
	R8164	1-218-734-11	METAL CHIP	56K	0.50%	1/16W
	R8165	1-249-425-11	CARBON	4.7K	5%	1/4W
	R8166	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
	R8168	1-216-809-11	RES-CHIP	100	5%	1/10W
	R8169	1-216-845-11	RES-CHIP	100K	5%	1/10W
	R8170	1-218-712-11	METAL CHIP	6.8K	0.50%	1/16W
	R8171	1-216-809-11	RES-CHIP	100	5%	1/10W
⚠	R8172	1-249-405-11	CARBON	100	5%	1/4W

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	R8173	1-216-845-11	RES-CHIP	100K	5%	1/10W
	R8174	1-249-425-11	CARBON	4.7K	5%	1/4W
	R8176	1-218-740-11	METAL CHIP	100K	0.50%	1/16W
	R8178	1-216-841-11	RES-CHIP	47K	5%	1/10W
	R8180	1-216-845-11	RES-CHIP	100K	5%	1/10W
	R8181	1-216-845-11	RES-CHIP	100K	5%	1/10W
	R8182	1-218-740-11	METAL CHIP	100K	0.50%	1/16W
	R8183	1-218-740-11	METAL CHIP	100K	0.50%	1/16W
	R8189	1-249-377-11	CARBON	0.47	5%	1/4W
	R8190	1-215-429-00	METAL	2.2K	1%	1/4W
	R8191	1-215-415-00	METAL	560	1%	1/4W
	R8192	1-215-445-00	METAL	10K	1%	1/4W
	R8193	1-215-445-00	METAL	10K	1%	1/4W
	R8194	1-215-445-00	METAL	10K	1%	1/4W
	R8195	1-215-445-00	METAL	10K	1%	1/4W
	R8196	1-249-425-11	CARBON	4.7K	5%	1/4W
	R8198	1-215-445-00	METAL	10K	1%	1/4W
	R8201	1-249-397-11	CARBON	22	5%	1/4W
	R8202	1-260-092-11	CARBON	270	5%	1/2W
⚠	R8205	1-249-377-11	CARBON	0.47	5%	1/4W
	R8206	1-249-377-11	CARBON	0.47	5%	1/4W
	R8208	1-260-288-11	CARBON	0.47	5%	1/2W
	R8209	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R8210	1-216-809-11	RES-CHIP	100	5%	1/10W
	R8211	1-215-906-11	METAL OXIDE	15	5%	3W
	R8212	1-215-907-11	METAL OXIDE	22	5%	3W
	R8213	1-216-821-11	RES-CHIP	1K	5%	1/10W
	R8216	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R8217	1-216-821-11	RES-CHIP	1K	5%	1/10W
	R8218	1-260-123-11	CARBON	100K	5%	1/2W
⚠	R8219	1-249-377-11	CARBON	0.47	5%	1/4W
	R8220	1-216-821-11	RES-CHIP	1K	5%	1/10W
	R8222	1-216-341-11	METAL OXIDE	0.22	5%	1W
	R8223	1-218-752-11	METAL CHIP	330K	0.50%	1/16W
	R8224	1-260-127-11	CARBON	220K	5%	1/2W
⚠	R8225	1-260-292-11	CARBON	1	5%	1/2W
⚠	R8228	1-260-314-11	CARBON	68	5%	1/2W
	R8230	1-218-751-11	METAL CHIP	300K	0.50%	1/16W
	R8232	1-216-809-11	RES-CHIP	100	5%	1/10W
	R8233	1-216-809-11	RES-CHIP	100	5%	1/10W
	R8234	1-216-809-11	RES-CHIP	100	5%	1/10W
	R8235	1-216-809-11	RES-CHIP	100	5%	1/10W
	R8236	1-216-855-11	RES-CHIP	680K	5%	1/10W
	R8237	1-216-855-11	RES-CHIP	680K	5%	1/10W

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

A component identified by this ⧓ symbol indicates that it has been carefully factory-selected to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

D M

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	R8242	1-216-864-11	SHORT CHIP	0		
	R8243	1-216-809-11	RES-CHIP	100	5%	1/10W
	R8249	1-215-923-00	METAL OXIDE	10K	5%	3W
	R8250	1-215-923-00	METAL OXIDE	10K	5%	3W
	R8251	1-216-821-11	RES-CHIP	1K	5%	1/10W
	R8253	1-216-816-11	RES-CHIP	390	5%	1/10W
	R8254	1-216-823-11	RES-CHIP	1.5K	5%	1/10W
	R8255	1-215-873-00	METAL OXIDE	4.7K	5%	1W
	R8256	1-249-401-11	CARBON	47	5%	1/4W
	R8258	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R8259	1-216-809-11	RES-CHIP	100	5%	1/10W
	R8260	1-216-845-11	RES-CHIP	100K	5%	1/10W
	R8261	1-216-845-11	RES-CHIP	100K	5%	1/10W
	R8262	1-216-845-11	RES-CHIP	100K	5%	1/10W
	R8263	1-216-845-11	RES-CHIP	100K	5%	1/10W

TRANSFORMER

	REF. NO.	PART NO.	DESCRIPTION
	T8001	1-437-708-11	TRANSFORMER, FERRITE (DFT)
	T8002	1-437-739-11	TRANSFORMER, FERRITE (HDT)
	T8003	1-437-401-11	TRANSFORMER, FERRITE (HOT)
⚠	T8004	1-437-399-21	TRANSFORMER, FERRITE (LOT)
⚠	T8005	1-453-285-51	FBT ASSY NX-4006//X4P4
	T8006	1-437-739-11	TRANSFORMER, FERRITE (HDT)

THERMISTOR

REF. NO.	PART NO.	DESCRIPTION
TH8001	1-800-193-00	THERMISTOR

VARIABLE RESISTOR

	REF. NO.	PART NO.	DESCRIPTION	VALUES
⧓	⚠VR8001	1-225-627-91	RES, VAR, ADJ, CERMET	2K
⧓	⚠VR8002	1-225-630-91	RES, VAR, ADJ, CERMET	20K

M

The M board is not field repairable. If service is required, use the following part number to order a complete replacement board. Data is provided for reference only.

*** A-1300-646-A M BOARD, COMPLETE**

CAPACITOR

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C2001	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C2002	1-126-933-11	ELECT	100μF	20%	16V
C2003	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2004	1-164-227-11	CERAMIC CHIP	0.022μF	10%	25V
C2005	1-162-964-11	CERAMIC CHIP	0.001μF	10%	50V
C2006	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2007	1-126-964-11	ELECT	10μF	20%	50V
C2010	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2011	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2012	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C2014	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2015	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2017	1-126-964-11	ELECT	10μF	20%	50V
C2019	1-126-964-11	ELECT	10μF	20%	50V
C2020	1-126-964-11	ELECT	10μF	20%	50V
C2022	1-126-964-11	ELECT	10μF	20%	50V
C2024	1-126-933-11	ELECT	100μF	20%	16V
C2025	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2027	1-126-964-11	ELECT	10μF	20%	50V
C2028	1-126-933-11	ELECT	100μF	20%	16V
C2029	1-126-964-11	ELECT	10μF	20%	50V
C2031	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C2032	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C2033	1-126-933-11	ELECT	100μF	20%	16V
C2034	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C2035	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C2036	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2037	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2038	1-162-916-11	CERAMIC CHIP	12pF	5%	50V
C2039	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C2040	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V
C2041	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C2042	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C2043	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C2044	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C2045	1-126-933-11	ELECT	100μF	20%	16V
C2046	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C2047	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C2048	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C2049	1-162-916-11	CERAMIC CHIP	12pF	5%	50V
C2050	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2051	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C2052	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V
C2053	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V
C2054	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C2055	1-126-933-11	ELECT	100μF	20%	16V
C2056	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V
C2057	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2058	1-126-963-11	ELECT	4.7μF	20%	50V

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C2059	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C2060	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C2061	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C2062	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2063	1-126-963-11	ELECT	4.7µF	20%	50V
C2064	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C2065	1-126-933-11	ELECT	100µF	20%	16V
C2066	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2067	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C2068	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2069	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C2070	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C2071	1-126-963-11	ELECT	4.7µF	20%	50V
C2072	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C2073	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2074	1-126-933-11	ELECT	100µF	20%	16V
C2075	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C2076	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C2077	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C2078	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C2079	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C2080	1-126-963-11	ELECT	4.7µF	20%	50V
C2081	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C2082	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C2083	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C2084	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C2085	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C2086	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C2087	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C2088	1-216-864-11	SHORT CHIP	0		
C2089	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2090	1-216-864-11	SHORT CHIP	0		
C2096	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C2097	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C2098	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C2099	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C2100	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C2101	1-126-933-11	ELECT	100µF	20%	16V
C2102	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C2103	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C2104	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2105	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C2106	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2107	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2108	1-126-933-11	ELECT	100µF	20%	16V
C2109	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C2111	1-126-964-11	ELECT	10µF	20%	50V
C2112	1-126-964-11	ELECT	10µF	20%	50V
C2113	1-126-964-11	ELECT	10µF	20%	50V
C2114	1-126-964-11	ELECT	10µF	20%	50V
C2115	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2116	1-126-933-11	ELECT	100µF	20%	16V
C2117	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2120	1-126-964-11	ELECT	10µF	20%	50V
C2121	1-126-964-11	ELECT	10µF	20%	50V
C2122	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C2123	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C2124	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2126	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C2130	1-126-933-11	ELECT	100µF	20%	16V
C2131	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2132	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2134	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2135	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C2200	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2201	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2202	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2204	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2205	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2206	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2207	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2208	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2209	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2210	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2211	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2212	1-126-933-11	ELECT	100µF	20%	16V
C2213	1-126-947-11	ELECT	47µF	20%	25V
C2214	1-126-933-11	ELECT	100µF	20%	16V
C2215	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2216	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2217	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2218	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2219	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2220	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2221	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C2222	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C2223	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C2224	1-115-156-11	CERAMIC CHIP	1µF		10V

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C2225	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C2226	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2227	1-126-933-11	ELECT	100µF	20%	16V
C2228	1-162-913-11	CERAMIC CHIP	8pF	0.50pF	50V
C2229	1-162-913-11	CERAMIC CHIP	8pF	0.50pF	50V
C2230	1-162-915-11	CERAMIC CHIP	10pF	0.50pF	50V
C2231	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C2232	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2233	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2234	1-126-933-11	ELECT	100µF	20%	16V
C2235	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2236	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2237	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C2238	1-126-933-11	ELECT	100µF	20%	16V
C2239	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2240	1-126-933-11	ELECT	100µF	20%	16V
C2241	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C2242	1-126-934-11	ELECT	220µF	20%	16V
C2243	1-126-934-11	ELECT	220µF	20%	16V
C2244	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C2245	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2246	1-126-947-11	ELECT	47µF	20%	25V
C2247	1-162-975-11	CERAMIC CHIP	24pF	5%	50V
C2248	1-162-975-11	CERAMIC CHIP	24pF	5%	50V
C2249	1-164-360-11	CERAMIC CHIP	0.1µF		16V
C2250	1-164-360-11	CERAMIC CHIP	0.1µF		16V
C2251	1-164-392-11	CERAMIC CHIP	390pF	5%	50V
C2300	1-162-968-11	CERAMIC CHIP	0.0047µF	10%	50V
C2301	1-126-933-11	ELECT	100µF	20%	16V
C2302	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2305	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2306	1-162-920-11	CERAMIC CHIP	27pF	5%	50V
C2307	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C2308	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2309	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2310	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C2311	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2312	1-162-910-11	CERAMIC CHIP	5pF	0.25pF	50V
C2313	1-115-156-11	CERAMIC CHIP	1µF		10V
C2315	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2317	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2318	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2319	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2321	1-164-156-11	CERAMIC CHIP	0.1µF		25V

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C2322	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2323	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2324	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2325	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2326	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2327	1-126-933-11	ELECT	100µF	20%	16V
C2328	1-126-933-11	ELECT	100µF	20%	16V
C2329	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2330	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2331	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2332	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2333	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C2334	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2335	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2336	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2337	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2338	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C2339	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2340	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C2341	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2342	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C2343	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C2344	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C2345	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C2346	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C2347	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2348	1-126-933-11	ELECT	100µF	20%	16V
C2349	1-162-968-11	CERAMIC CHIP	0.0047µF	10%	50V
C2352	1-126-933-11	ELECT	100µF	20%	16V
C2353	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2354	1-162-907-11	CERAMIC CHIP	2pF	0.25pF	50V
C2355	1-164-245-11	CERAMIC CHIP	0.015µF	10%	25V
C2358	1-126-935-11	ELECT	470µF	20%	6.3V
C2359	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2361	1-126-933-11	ELECT	100µF	20%	16V
C2362	1-126-933-11	ELECT	100µF	20%	16V
C2370	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2500	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C2501	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C2503	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C2504	1-126-933-11	ELECT	100µF	20%	16V
C2506	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C2508	1-126-933-11	ELECT	100µF	20%	16V
C2510	1-162-960-11	CERAMIC CHIP	220pF	10%	50V

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C2512	1-135-834-91	CERAMIC CHIP	2.2E+06pF		6.3V
C2513	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C2514	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2515	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C2516	1-126-933-11	ELECT	100μF	20%	16V
C2517	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C2518	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C2519	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C2520	1-162-960-11	CERAMIC CHIP	220pF	10%	50V
C2521	1-162-960-11	CERAMIC CHIP	220pF	10%	50V
C2522	1-126-947-11	ELECT	47μF	20%	25V
C2523	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C2524	1-135-834-91	CERAMIC CHIP	2.2E+06pF		6.3V
C2525	1-135-834-91	CERAMIC CHIP	2.2E+06pF		6.3V
C2527	1-135-834-91	CERAMIC CHIP	2.2E+06pF		6.3V
C2528	1-162-962-11	CERAMIC CHIP	470pF	10%	50V
C2530	1-126-947-11	ELECT	47μF	20%	25V
C2532	1-135-834-91	CERAMIC CHIP	2.2E+06pF		6.3V
C2533	1-162-960-11	CERAMIC CHIP	220pF	10%	50V
C2534	1-126-947-11	ELECT	47μF	20%	25V
C2535	1-162-962-11	CERAMIC CHIP	470pF	10%	50V
C2536	1-135-834-91	CERAMIC CHIP	2.2E+06pF		6.3V
C2538	1-126-947-11	ELECT	47μF	20%	25V
C2539	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C2540	1-162-915-11	CERAMIC CHIP	10pF	0.50pF	50V
C2541	1-162-915-11	CERAMIC CHIP	10pF	0.50pF	50V
C2542	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C2543	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C2544	1-126-963-11	ELECT	4.7μF	20%	50V
C2545	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C2546	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C2548	1-126-947-11	ELECT	47μF	20%	25V
C2549	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C2550	1-126-963-11	ELECT	4.7μF	20%	50V
C2551	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C2553	1-126-947-11	ELECT	47μF	20%	25V
C2554	1-126-947-11	ELECT	47μF	20%	25V
C2558	1-126-963-11	ELECT	4.7μF	20%	50V
C2559	1-126-933-11	ELECT	100μF	20%	16V
C2560	1-126-947-11	ELECT	47μF	20%	25V
C2561	1-126-963-11	ELECT	4.7μF	20%	50V
C2563	1-126-961-11	ELECT	2.2μF	20%	50V
C2564	1-126-961-11	ELECT	2.2μF	20%	50V
C2565	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C2566	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C2569	1-126-961-11	ELECT	2.2μF	20%	50V
C2570	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C2571	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2572	1-126-960-11	ELECT	1μF	20%	50V
C2574	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C2575	1-126-960-11	ELECT	1μF	20%	50V
C2579	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C2582	1-126-933-11	ELECT	100μF	20%	16V
C2584	1-126-933-11	ELECT	100μF	20%	16V

CONNECTOR

REF. NO.	PART NO.	DESCRIPTION	VALUES
CN2006	1-793-174-11	SOCKET,PCCONNECTOR (PC BOARD)	
CN2304	1-764-334-11	PLUG,CONNECTOR	11P
CN2305	1-770-721-11	CONNECTOR, BOARD TO BOARD 4P	

DIODE

REF. NO.	PART NO.	DESCRIPTION
D2300	8-719-914-43	DIODE DAN202K-T-146
D2301	8-719-914-43	DIODE DAN202K-T-146
D2302	8-719-914-44	DIODE DAP202K-T-146
D2303	8-719-914-44	DIODE DAP202K-T-146
D2310	8-719-083-57	DIODE UDZSTE-173.6B
D2500	8-719-404-50	DIODE MA111-TX
D2501	8-719-404-50	DIODE MA111-TX
D2502	8-719-404-50	DIODE MA111-TX

FERRITE BEAD

REF. NO.	PART NO.	DESCRIPTION	VALUES
FB2001	1-414-229-11	FERRITE	0μH
FB2002	1-414-229-11	FERRITE	0μH
FB2200	1-414-229-11	FERRITE	0μH
FB2500	1-216-864-11	SHORT CHIP	0
FB2501	1-216-864-11	SHORT CHIP	0
FB2503	1-216-864-11	SHORT CHIP	0
FB2504	1-216-864-11	SHORT CHIP	0
FB2505	1-414-229-11	FERRITE	0μH
FB2507	1-414-229-11	FERRITE	0μH
FB2508	1-414-229-11	FERRITE	0μH
FB2509	1-216-864-11	SHORT CHIP	0
FB2510	1-414-229-11	FERRITE	0μH
FB2511	1-216-864-11	SHORT CHIP	0
FB2512	1-414-229-11	FERRITE	0μH
FB2513	1-216-864-11	SHORT CHIP	0
FB2514	1-216-864-11	SHORT CHIP	0
FB2515	1-414-229-11	FERRITE	0μH

REF. NO.	PART NO.	DESCRIPTION	VALUES
FB2516	1-414-229-11	FERRITE	0μH
FB2517	1-414-229-11	FERRITE	0μH
FB2518	1-414-229-11	FERRITE	0μH
FB2519	1-414-229-11	FERRITE	0μH
FB2520	1-216-864-11	SHORT CHIP	0
FB2521	1-216-864-11	SHORT CHIP	0
FB2522	1-414-229-11	FERRITE	0μH
	FILTER		
FL2001	1-239-848-21	FILTER, LOW PASS	
FL2002	1-239-848-21	FILTER, LOW PASS	
FL2003	1-239-848-21	FILTER, LOW PASS	
FL2201	1-239-848-21	FILTER, LOW PASS	
FL2202	1-239-848-21	FILTER, LOW PASS	
FL2203	1-239-848-21	FILTER, LOW PASS	
FL2204	1-239-848-21	FILTER, LOW PASS	
	IC		
IC2001	8-752-394-69	IC CXD2073Q-T4	
IC2004	8-752-102-21	IC CXA2103AQ	
IC2005	8-752-102-21	IC CXA2103AQ	
IC2006	8-752-103-44	IC CXA2171Q	
IC2008	8-759-448-68	IC NJM2283V-TE1	
IC2009	6-700-205-01	IC TC74LVX157FT(EL)	
IC2010	6-700-205-01	IC TC74LVX157FT(EL)	
IC2200	6-700-960-01	IC UPD64083GF-3BA	
IC2201	6-700-399-01	IC UPC2925T-E1	
IC2300	6-802-167-01	IC M306V3MG-052FP	
IC2301	6-801-375-01	IC PST9129NL	
IC2302	8-759-682-41	IC M24C32-WMN6T(A)	
IC2303	8-752-930-68	IC CXP964032-001Q	
IC2304	8-752-930-68	IC CXP964032-001Q	
IC2305	8-759-641-26	IC NJM2391DL1-33(TE1)	
IC2500	8-759-394-57	IC PST593C-MMP-4P	
IC2501	6-801-750-01	IC TC94A04F-014	
IC2502	8-759-331-71	IC NJM4558E(TE2)	
IC2504	8-759-642-22	IC UPC29M05T-E2	
	CHIP CONDUCTOR		
JR1	1-216-864-11	SHORT CHIP	0
JR2001	1-216-864-11	SHORT CHIP	0
JR2002	1-216-864-11	SHORT CHIP	0
JR2003	1-216-864-11	SHORT CHIP	0
JR2004	1-216-864-11	SHORT CHIP	0
JR2005	1-216-864-11	SHORT CHIP	0

REF. NO.	PART NO.	DESCRIPTION	VALUES		
	COIL				
L2001	1-469-555-21	INDUCTOR	10μH		
L2003	1-469-555-21	INDUCTOR	10μH		
L2004	1-469-555-21	INDUCTOR	10μH		
L2005	1-469-555-21	INDUCTOR	10μH		
L2006	1-469-555-21	INDUCTOR	10μH		
L2007	1-469-555-21	INDUCTOR	10μH		
L2008	1-469-555-21	INDUCTOR	10μH		
L2009	1-469-555-21	INDUCTOR	10μH		
L2010	1-469-555-21	INDUCTOR	10μH		
L2011	1-469-555-21	INDUCTOR	10μH		
L2012	1-469-555-21	INDUCTOR	10μH		
L2013	1-469-555-21	INDUCTOR	10μH		
L2200	1-469-555-21	INDUCTOR	10μH		
L2201	1-469-555-21	INDUCTOR	10μH		
L2202	1-469-555-21	INDUCTOR	10μH		
L2203	1-216-001-00	RES-CHIP	10	5%	1/10W
L2204	1-469-555-21	INDUCTOR	10μH		
L2205	1-216-001-00	RES-CHIP	10	5%	1/10W
L2206	1-469-555-21	INDUCTOR	10μH		
L2207	1-469-553-21	INDUCTOR	4.7μH		
L2301	1-469-555-21	INDUCTOR	10μH		
L2302	1-469-555-21	INDUCTOR	10μH		
L2303	1-469-555-21	INDUCTOR	10μH		
L2501	1-412-537-31	INDUCTOR	100μH		
L2502	1-216-295-91	SHORT CHIP	0		
	TRANSISTOR				
Q2001	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q2002	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q2003	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q2004	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q2005	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q2006	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q2007	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q2008	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q2009	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q2010	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q2011	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q2012	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q2013	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q2014	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q2015	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			

REF. NO.	PART NO.	DESCRIPTION	VALUES
Q2016	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2018	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2019	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2200	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q2201	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q2202	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2203	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q2204	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q2205	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2206	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2207	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2208	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2209	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2210	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2211	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2212	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2213	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2214	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q2215	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2216	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q2301	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2302	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2303	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2304	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2305	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2306	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2307	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2308	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q2309	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q2310	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2311	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2312	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2313	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2314	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q2315	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q2316	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q2317	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2318	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2320	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2321	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2322	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2323	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2500	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2501	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2502	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
Q2503	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2504	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2505	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2506	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2507	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2508	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2509	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2510	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2511	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2512	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q2513	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	

RESISTOR

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R2001	1-216-809-11	RES-CHIP	100	5%	1/10W
R2002	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2003	1-218-686-11	METAL CHIP	560	0.50%	1/16W
R2004	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2005	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2006	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2007	1-218-708-11	METAL CHIP	4.7K	0.50%	1/16W
R2008	1-218-692-11	METAL CHIP	1K	0.50%	1/16W
R2009	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2010	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2011	1-218-686-11	METAL CHIP	560	0.50%	1/16W
R2012	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2013	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2014	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2015	1-218-734-11	METAL CHIP	56K	0.50%	1/16W
R2016	1-216-839-11	RES-CHIP	33K	5%	1/10W
R2017	1-216-837-11	RES-CHIP	22K	5%	1/10W
R2018	1-216-812-11	RES-CHIP	180	5%	1/10W
R2020	1-216-811-11	RES-CHIP	150	5%	1/10W
R2022	1-218-704-11	METAL CHIP	3.3K	0.50%	1/16W
R2023	1-216-839-11	RES-CHIP	33K	5%	1/10W
R2024	1-216-837-11	RES-CHIP	22K	5%	1/10W
R2025	1-218-700-11	METAL CHIP	2.2K	0.50%	1/16W
R2026	1-218-704-11	METAL CHIP	3.3K	0.50%	1/16W
R2027	1-216-864-11	SHORT CHIP	0		
R2030	1-216-817-11	RES-CHIP	470	5%	1/10W
R2032	1-216-817-11	RES-CHIP	470	5%	1/10W
R2035	1-216-817-11	RES-CHIP	470	5%	1/10W
R2036	1-216-837-11	RES-CHIP	22K	5%	1/10W
R2040	1-216-817-11	RES-CHIP	470	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R2041	1-216-837-11	RES-CHIP	22K	5%	1/10W
R2045	1-218-686-11	METAL CHIP	560	0.50%	1/16W
R2046	1-218-686-11	METAL CHIP	560	0.50%	1/16W
R2048	1-218-710-11	METAL CHIP	5.6K	0.50%	1/16W
R2049	1-218-710-11	METAL CHIP	5.6K	0.50%	1/16W
R2050	1-216-817-11	RES-CHIP	470	5%	1/10W
R2051	1-216-817-11	RES-CHIP	470	5%	1/10W
R2052	1-216-835-11	RES-CHIP	15K	5%	1/10W
R2053	1-216-864-11	SHORT CHIP	0		
R2054	1-216-835-11	RES-CHIP	15K	5%	1/10W
R2055	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2056	1-216-809-11	RES-CHIP	100	5%	1/10W
R2057	1-216-809-11	RES-CHIP	100	5%	1/10W
R2058	1-216-809-11	RES-CHIP	100	5%	1/10W
R2059	1-216-809-11	RES-CHIP	100	5%	1/10W
R2061	1-216-828-11	RES-CHIP	3.9K	5%	1/10W
R2064	1-216-828-11	RES-CHIP	3.9K	5%	1/10W
R2067	1-216-809-11	RES-CHIP	100	5%	1/10W
R2069	1-216-864-11	SHORT CHIP	0		
R2071	1-216-864-11	SHORT CHIP	0		
R2072	1-216-841-11	RES-CHIP	47K	5%	1/10W
R2073	1-216-841-11	RES-CHIP	47K	5%	1/10W
R2074	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2075	1-216-864-11	SHORT CHIP	0		
R2076	1-216-864-11	SHORT CHIP	0		
R2077	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2081	1-216-809-11	RES-CHIP	100	5%	1/10W
R2082	1-216-809-11	RES-CHIP	100	5%	1/10W
R2083	1-216-851-11	RES-CHIP	330K	5%	1/10W
R2086	1-216-818-11	RES-CHIP	560	5%	1/10W
R2087	1-216-818-11	RES-CHIP	560	5%	1/10W
R2091	1-216-809-11	RES-CHIP	100	5%	1/10W
R2092	1-216-818-11	RES-CHIP	560	5%	1/10W
R2093	1-216-818-11	RES-CHIP	560	5%	1/10W
R2094	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R2095	1-216-864-11	SHORT CHIP	0		
R2097	1-216-809-11	RES-CHIP	100	5%	1/10W
R2099	1-216-809-11	RES-CHIP	100	5%	1/10W
R2101	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2103	1-216-809-11	RES-CHIP	100	5%	1/10W
R2105	1-216-809-11	RES-CHIP	100	5%	1/10W
R2107	1-216-809-11	RES-CHIP	100	5%	1/10W
R2110	1-216-818-11	RES-CHIP	560	5%	1/10W
R2111	1-216-818-11	RES-CHIP	560	5%	1/10W
R2112	1-216-809-11	RES-CHIP	100	5%	1/10W
R2113	1-216-809-11	RES-CHIP	100	5%	1/10W
R2114	1-216-805-11	RES-CHIP	47	5%	1/10W
R2115	1-216-805-11	RES-CHIP	47	5%	1/10W
R2116	1-216-805-11	RES-CHIP	47	5%	1/10W
R2118	1-216-809-11	RES-CHIP	100	5%	1/10W
R2119	1-216-809-11	RES-CHIP	100	5%	1/10W
R2120	1-216-809-11	RES-CHIP	100	5%	1/10W
R2123	1-216-809-11	RES-CHIP	100	5%	1/10W
R2124	1-216-809-11	RES-CHIP	100	5%	1/10W
R2125	1-216-809-11	RES-CHIP	100	5%	1/10W
R2126	1-216-809-11	RES-CHIP	100	5%	1/10W
R2131	1-216-809-11	RES-CHIP	100	5%	1/10W
R2133	1-216-864-11	SHORT CHIP	0		
R2201	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2202	1-216-809-11	RES-CHIP	100	5%	1/10W
R2203	1-216-809-11	RES-CHIP	100	5%	1/10W
R2204	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2205	1-216-864-11	SHORT CHIP	0		
R2206	1-216-864-11	SHORT CHIP	0		
R2207	1-216-809-11	RES-CHIP	100	5%	1/10W
R2208	1-216-809-11	RES-CHIP	100	5%	1/10W
R2209	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2210	1-216-818-11	RES-CHIP	560	5%	1/10W
R2211	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2212	1-216-818-11	RES-CHIP	560	5%	1/10W
R2213	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R2214	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2215	1-216-830-11	RES-CHIP	5.6K	5%	1/10W
R2216	1-216-817-11	RES-CHIP	470	5%	1/10W
R2217	1-216-817-11	RES-CHIP	470	5%	1/10W
R2218	1-216-830-11	RES-CHIP	5.6K	5%	1/10W
R2219	1-216-830-11	RES-CHIP	5.6K	5%	1/10W
R2220	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2221	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2222	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2223	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2224	1-216-809-11	RES-CHIP	100	5%	1/10W
R2225	1-216-818-11	RES-CHIP	560	5%	1/10W
R2226	1-216-817-11	RES-CHIP	470	5%	1/10W
R2227	1-216-816-11	RES-CHIP	390	5%	1/10W
R2228	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2229	1-216-849-11	RES-CHIP	220K	5%	1/10W
R2230	1-216-841-11	RES-CHIP	47K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R2231	1-216-819-11	RES-CHIP	680	5%	1/10W
R2232	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2233	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2234	1-216-820-11	RES-CHIP	820	5%	1/10W
R2235	1-216-822-11	RES-CHIP	1.2K	5%	1/10W
R2236	1-216-813-11	RES-CHIP	220	5%	1/10W
R2237	1-216-820-11	RES-CHIP	820	5%	1/10W
R2238	1-216-819-11	RES-CHIP	680	5%	1/10W
R2239	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2240	1-216-834-11	RES-CHIP	12K	5%	1/10W
R2241	1-216-839-11	RES-CHIP	33K	5%	1/10W
R2242	1-218-680-11	METAL CHIP	330	0.50%	1/16W
R2243	1-216-834-11	RES-CHIP	12K	5%	1/10W
R2244	1-216-839-11	RES-CHIP	33K	5%	1/10W
R2245	1-218-684-11	METAL CHIP	470	0.50%	1/16W
R2246	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2247	1-216-805-11	RES-CHIP	47	5%	1/10W
R2248	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2249	1-216-805-11	RES-CHIP	47	5%	1/10W
R2250	1-216-830-11	RES-CHIP	5.6K	5%	1/10W
R2251	1-216-818-11	RES-CHIP	560	5%	1/10W
R2252	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2253	1-216-809-11	RES-CHIP	100	5%	1/10W
R2254	1-216-817-11	RES-CHIP	470	5%	1/10W
R2255	1-216-817-11	RES-CHIP	470	5%	1/10W
R2256	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2257	1-216-864-11	SHORT CHIP	0		
R2258	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2259	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2260	1-216-840-11	RES-CHIP	39K	5%	1/10W
R2261	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2298	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2299	1-216-841-11	RES-CHIP	47K	5%	1/10W
R2300	1-216-841-11	RES-CHIP	47K	5%	1/10W
R2301	1-216-809-11	RES-CHIP	100	5%	1/10W
R2302	1-216-809-11	RES-CHIP	100	5%	1/10W
R2303	1-216-809-11	RES-CHIP	100	5%	1/10W
R2304	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R2305	1-216-809-11	RES-CHIP	100	5%	1/10W
R2306	1-216-809-11	RES-CHIP	100	5%	1/10W
R2307	1-216-809-11	RES-CHIP	100	5%	1/10W
R2308	1-216-809-11	RES-CHIP	100	5%	1/10W
R2309	1-216-809-11	RES-CHIP	100	5%	1/10W
R2310	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2311	1-216-809-11	RES-CHIP	100	5%	1/10W
R2312	1-216-809-11	RES-CHIP	100	5%	1/10W
R2313	1-216-809-11	RES-CHIP	100	5%	1/10W
R2314	1-216-809-11	RES-CHIP	100	5%	1/10W
R2315	1-216-809-11	RES-CHIP	100	5%	1/10W
R2316	1-216-809-11	RES-CHIP	100	5%	1/10W
R2317	1-216-809-11	RES-CHIP	100	5%	1/10W
R2318	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2319	1-216-809-11	RES-CHIP	100	5%	1/10W
R2320	1-216-809-11	RES-CHIP	100	5%	1/10W
R2321	1-216-809-11	RES-CHIP	100	5%	1/10W
R2322	1-216-809-11	RES-CHIP	100	5%	1/10W
R2323	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2324	1-216-809-11	RES-CHIP	100	5%	1/10W
R2325	1-216-864-11	SHORT CHIP	0		
R2326	1-216-809-11	RES-CHIP	100	5%	1/10W
R2327	1-216-809-11	RES-CHIP	100	5%	1/10W
R2328	1-216-809-11	RES-CHIP	100	5%	1/10W
R2329	1-216-815-11	RES-CHIP	330	5%	1/10W
R2330	1-216-817-11	RES-CHIP	470	5%	1/10W
R2333	1-216-809-11	RES-CHIP	100	5%	1/10W
R2335	1-216-820-11	RES-CHIP	820	5%	1/10W
R2336	1-216-809-11	RES-CHIP	100	5%	1/10W
R2337	1-216-809-11	RES-CHIP	100	5%	1/10W
R2338	1-216-864-11	SHORT CHIP	0		
R2339	1-216-809-11	RES-CHIP	100	5%	1/10W
R2340	1-216-809-11	RES-CHIP	100	5%	1/10W
R2341	1-216-809-11	RES-CHIP	100	5%	1/10W
R2342	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R2343	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2344	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2345	1-216-809-11	RES-CHIP	100	5%	1/10W
R2346	1-218-734-11	METAL CHIP	56K	0.50%	1/16W
R2347	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2348	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R2349	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2350	1-216-809-11	RES-CHIP	100	5%	1/10W
R2351	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2352	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2353	1-216-809-11	RES-CHIP	100	5%	1/10W
R2354	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R2355	1-216-809-11	RES-CHIP	100	5%	1/10W
R2356	1-216-805-11	RES-CHIP	47	5%	1/10W
R2357	1-216-833-11	RES-CHIP	10K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R2358	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2359	1-216-805-11	RES-CHIP	47	5%	1/10W
R2360	1-216-864-11	SHORT CHIP	0		
R2361	1-216-864-11	SHORT CHIP	0		
R2362	1-216-805-11	RES-CHIP	47	5%	1/10W
R2363	1-216-841-11	RES-CHIP	47K	5%	1/10W
R2364	1-216-809-11	RES-CHIP	100	5%	1/10W
R2365	1-216-864-11	SHORT CHIP	0		
R2366	1-216-864-11	SHORT CHIP	0		
R2367	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R2368	1-216-809-11	RES-CHIP	100	5%	1/10W
R2369	1-216-805-11	RES-CHIP	47	5%	1/10W
R2370	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2371	1-216-809-11	RES-CHIP	100	5%	1/10W
R2372	1-216-809-11	RES-CHIP	100	5%	1/10W
R2373	1-216-864-11	SHORT CHIP	0		
R2374	1-216-864-11	SHORT CHIP	0		
R2375	1-216-837-11	RES-CHIP	22K	5%	1/10W
R2376	1-216-805-11	RES-CHIP	47	5%	1/10W
R2377	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2378	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R2379	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2380	1-216-809-11	RES-CHIP	100	5%	1/10W
R2381	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2382	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2383	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2384	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2385	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2386	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2387	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2388	1-216-815-11	RES-CHIP	330	5%	1/10W
R2389	1-216-815-11	RES-CHIP	330	5%	1/10W
R2390	1-216-809-11	RES-CHIP	100	5%	1/10W
R2391	1-216-809-11	RES-CHIP	100	5%	1/10W
R2392	1-216-809-11	RES-CHIP	100	5%	1/10W
R2393	1-216-809-11	RES-CHIP	100	5%	1/10W
R2394	1-216-864-11	SHORT CHIP	0		
R2395	1-216-864-11	SHORT CHIP	0		
R2396	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2397	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2398	1-216-857-11	RES-CHIP	1M	5%	1/10W
R2399	1-218-706-11	METAL CHIP	3.9K	0.50%	1/16W
R2400	1-216-811-11	RES-CHIP	150	5%	1/10W
R2401	1-216-811-11	RES-CHIP	150	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R2402	1-216-811-11	RES-CHIP	150	5%	1/10W
R2403	1-216-857-11	RES-CHIP	1M	5%	1/10W
R2404	1-218-706-11	METAL CHIP	3.9K	0.50%	1/16W
R2405	1-216-811-11	RES-CHIP	150	5%	1/10W
R2406	1-216-811-11	RES-CHIP	150	5%	1/10W
R2407	1-216-811-11	RES-CHIP	150	5%	1/10W
R2408	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R2409	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2410	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2411	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2412	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2413	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R2414	1-216-827-11	RES-CHIP	3.3K	5%	1/10W
R2415	1-218-692-11	METAL CHIP	1K	0.50%	1/16W
R2416	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2417	1-216-827-11	RES-CHIP	3.3K	5%	1/10W
R2418	1-218-692-11	METAL CHIP	1K	0.50%	1/16W
R2419	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2420	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2421	1-216-841-11	RES-CHIP	47K	5%	1/10W
R2422	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2423	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2424	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2425	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2426	1-216-841-11	RES-CHIP	47K	5%	1/10W
R2427	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2428	1-216-824-11	RES-CHIP	1.8K	5%	1/10W
R2429	1-216-824-11	RES-CHIP	1.8K	5%	1/10W
R2430	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2431	1-216-841-11	RES-CHIP	47K	5%	1/10W
R2432	1-216-841-11	RES-CHIP	47K	5%	1/10W
R2433	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2434	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2435	1-216-820-11	RES-CHIP	820	5%	1/10W
R2436	1-216-820-11	RES-CHIP	820	5%	1/10W
R2437	1-216-809-11	RES-CHIP	100	5%	1/10W
R2438	1-216-820-11	RES-CHIP	820	5%	1/10W
R2450	1-216-864-11	SHORT CHIP	0		
R2452	1-216-839-11	RES-CHIP	33K	5%	1/10W
R2453	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2454	1-216-809-11	RES-CHIP	100	5%	1/10W
R2455	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2459	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2460	1-216-809-11	RES-CHIP	100	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R2461	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2463	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2464	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2466	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2467	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2469	1-216-809-11	RES-CHIP	100	5%	1/10W
R2470	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2471	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2472	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2473	1-216-839-11	RES-CHIP	33K	5%	1/10W
R2474	1-216-837-11	RES-CHIP	22K	5%	1/10W
R2480	1-216-845-11	RES-CHIP	100K	5%	1/10W
R2481	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2483	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R2484	1-216-841-11	RES-CHIP	47K	5%	1/10W
R2500	1-216-809-11	RES-CHIP	100	5%	1/10W
R2501	1-216-839-11	RES-CHIP	33K	5%	1/10W
R2502	1-216-864-11	SHORT CHIP	0		
R2503	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R2506	1-216-841-11	RES-CHIP	47K	5%	1/10W
R2508	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2509	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R2510	1-216-839-11	RES-CHIP	33K	5%	1/10W
R2511	1-216-839-11	RES-CHIP	33K	5%	1/10W
R2512	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R2513	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2514	1-216-841-11	RES-CHIP	47K	5%	1/10W
R2515	1-216-841-11	RES-CHIP	47K	5%	1/10W
R2516	1-216-839-11	RES-CHIP	33K	5%	1/10W
R2517	1-216-841-11	RES-CHIP	47K	5%	1/10W
R2518	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R2519	1-216-857-11	RES-CHIP	1M	5%	1/10W
R2520	1-216-864-11	SHORT CHIP	0		
R2521	1-216-864-11	SHORT CHIP	0		
R2522	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R2523	1-216-813-11	RES-CHIP	220	5%	1/10W
R2524	1-216-809-11	RES-CHIP	100	5%	1/10W
R2525	1-216-813-11	RES-CHIP	220	5%	1/10W
R2526	1-216-864-11	SHORT CHIP	0		
R2528	1-216-809-11	RES-CHIP	100	5%	1/10W
R2529	1-216-809-11	RES-CHIP	100	5%	1/10W
R2530	1-216-809-11	RES-CHIP	100	5%	1/10W
R2531	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2532	1-216-837-11	RES-CHIP	22K	5%	1/10W
R2533	1-216-864-11	SHORT CHIP	0		
R2534	1-216-837-11	RES-CHIP	22K	5%	1/10W
R2535	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2536	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R2538	1-216-841-11	RES-CHIP	47K	5%	1/10W
R2539	1-216-841-11	RES-CHIP	47K	5%	1/10W
R2540	1-216-864-11	SHORT CHIP	0		
R2541	1-216-864-11	SHORT CHIP	0		
R2542	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R2543	1-216-864-11	SHORT CHIP	0		
R2546	1-216-813-11	RES-CHIP	220	5%	1/10W
R2547	1-216-813-11	RES-CHIP	220	5%	1/10W
R2548	1-216-841-11	RES-CHIP	47K	5%	1/10W
R2549	1-216-813-11	RES-CHIP	220	5%	1/10W
R2550	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2551	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2552	1-216-809-11	RES-CHIP	100	5%	1/10W
R2553	1-216-853-11	RES-CHIP	470K	5%	1/10W
R2554	1-216-809-11	RES-CHIP	100	5%	1/10W
R2555	1-216-853-11	RES-CHIP	470K	5%	1/10W
R2556	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2557	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2558	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2559	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2560	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2561	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2562	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2563	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2564	1-216-817-11	RES-CHIP	470	5%	1/10W
R2565	1-216-837-11	RES-CHIP	22K	5%	1/10W
R2566	1-216-837-11	RES-CHIP	22K	5%	1/10W
R2567	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2568	1-216-837-11	RES-CHIP	22K	5%	1/10W
R2569	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2570	1-216-837-11	RES-CHIP	22K	5%	1/10W
R2571	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2572	1-216-837-11	RES-CHIP	22K	5%	1/10W
R2573	1-216-837-11	RES-CHIP	22K	5%	1/10W
R2574	1-216-837-11	RES-CHIP	22K	5%	1/10W
R2575	1-216-837-11	RES-CHIP	22K	5%	1/10W
R2576	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2577	1-216-837-11	RES-CHIP	22K	5%	1/10W
R2578	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2579	1-216-837-11	RES-CHIP	22K	5%	1/10W

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	R2580	1-216-821-11	RES-CHIP	1K	5%	1/10W
	R2581	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
	R2582	1-216-809-11	RES-CHIP	100	5%	1/10W
	R2584	1-216-813-11	RES-CHIP	220	5%	1/10W
	R2585	1-216-864-11	SHORT CHIP	0		
	R2593	1-216-864-11	SHORT CHIP	0		
	R2603	1-216-845-11	RES-CHIP	100K	5%	1/10W
	R2604	1-216-845-11	RES-CHIP	100K	5%	1/10W
	R2605	1-216-864-11	SHORT CHIP	0		
	R2607	1-216-821-11	RES-CHIP	1K	5%	1/10W
	R2608	1-216-833-11	RES-CHIP	10K	5%	1/10W

CRYSTAL

	REF. NO.	PART NO.	DESCRIPTION
	X2001	1-567-505-11	OSCILLATOR, CRYSTAL
	X2002	1-567-505-11	OSCILLATOR, CRYSTAL
	X2003	1-781-282-11	VIBRATOR, CERAMIC
	X2200	1-767-606-11	VIBRATOR, CRYSTAL
	X2300	1-795-572-11	VIBRATOR, CRYSTAL
	X2302	1-795-565-21	VIBRATOR, CERAMIC
	X2303	1-795-565-21	VIBRATOR, CERAMIC
	X2500	1-767-639-21	VIBRATOR, CRYSTAL

HB

*** A-1400-747-A HB BOARD, MOUNTED**

CAPACITOR

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	C1100	1-126-960-11	ELECT	1μF	20%	50V
	C1101	1-126-960-11	ELECT	1μF	20%	50V

CONNECTOR

	REF. NO.	PART NO.	DESCRIPTION	VALUES
*	CN1101	1-564-526-11	PLUG,CONNECTOR	11P

DIODE

	REF. NO.	PART NO.	DESCRIPTION
	D1100	8-719-110-17	DIODE MTZJ-T-77-10B
	D1101	8-719-110-17	DIODE MTZJ-T-77-10B
	D1103	8-719-110-17	DIODE MTZJ-T-77-10B

JACK

	REF. NO.	PART NO.	DESCRIPTION
	J1101	1-770-361-11	TERMINAL BLOCK, S

RESISTOR

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	R1100	1-247-895-91	CARBON	470K	5%	1/4W
	R1101	1-247-895-91	CARBON	470K	5%	1/4W
	R1102	1-247-804-11	CARBON	75	5%	1/4W
	R1103	1-247-804-11	CARBON	75	5%	1/4W
	R1106	1-249-417-11	CARBON	1K	5%	1/4W
	R1107	1-247-804-11	CARBON	75	5%	1/4W

HM

The HM board is not field repairable. If service is required, use the following part number to order a complete replacement board. Data is provided for reference only.

*** A-1300-323-A HM BOARD, MOUNTED**

CAPACITOR

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	C7205	1-164-156-11	CERAMIC CHIP	0.1μF		25V
	C7206	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V
	C7208	1-124-779-00	ELECT CHIP	10μF	20%	16V
	C7209	1-164-156-11	CERAMIC CHIP	0.1μF		25V
	C7210	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V
	C7212	1-164-156-11	CERAMIC CHIP	0.1μF		25V
	C7213	1-124-778-00	ELECT CHIP	22μF	20%	6.3V
	C7214	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
	C7215	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
	C7216	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
	C7217	1-124-778-00	ELECT CHIP	22μF	20%	6.3V
	C7219	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
	C7220	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V

CONNECTOR

	REF. NO.	PART NO.	DESCRIPTION
*	CN7201	1-816-402-11	CONNECTOR, MEMORY STICK
	CN7205	1-695-915-11	TAB (CONTACT)

DIODE

	REF. NO.	PART NO.	DESCRIPTION
	D7201	8-719-800-76	DIODE MA153-TX
	D7202	8-719-800-76	DIODE MA153-TX
	D7203	8-719-800-76	DIODE MA153-TX
	D7204	8-719-800-76	DIODE MA153-TX
	D7205	8-719-800-76	DIODE MA153-TX
	D7206	8-719-800-76	DIODE MA153-TX
	D7207	8-719-800-76	DIODE MA153-TX
	D7208	8-719-800-76	DIODE MA153-TX
	D7209	6-500-182-01	DIODE L1503CB/ID
	D7210	8-719-083-58	DIODE UDZSTE-173.9B

REF. NO.	PART NO.	DESCRIPTION	VALUES		
D7211	8-719-083-58	DIODE UDZSTE-173.9B			
D7212	8-719-800-76	DIODE MA153-TX			
D7213	8-719-800-76	DIODE MA153-TX			
D7214	8-719-800-76	DIODE MA153-TX			
D7215	8-719-800-76	DIODE MA153-TX			
D7216	8-719-800-76	DIODE MA153-TX			
D7217	8-719-800-76	DIODE MA153-TX			

FERRITE BEAD

REF. NO.	PART NO.	DESCRIPTION	VALUES
FB7201	1-414-921-11	FERRITE	0μH
FB7202	1-414-921-11	FERRITE	0μH
FB7203	1-414-921-11	FERRITE	0μH
FB7204	1-414-921-11	FERRITE	0μH

IC

REF. NO.	PART NO.	DESCRIPTION
IC7201	8-759-639-86	IC SN65LVDS32DR
IC7202	6-701-763-11	IC DS90LV017ATMX
IC7203	8-759-698-08	IC SN74CBTLV1G125DCKR

COIL

REF. NO.	PART NO.	DESCRIPTION	VALUES
L7201	1-419-370-21	INDUCTOR	0μH
L7202	1-419-370-21	INDUCTOR	0μH
L7203	1-419-370-21	INDUCTOR	0μH
L7204	1-419-370-21	INDUCTOR	0μH
L7205	1-419-370-21	INDUCTOR	0μH

TRANSISTOR

REF. NO.	PART NO.	DESCRIPTION
Q7201	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX
Q7202	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX
Q7203	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX

RESISTOR

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R7201	1-216-801-11	RES-CHIP	22	5%	1/10W
R7202	1-216-801-11	RES-CHIP	22	5%	1/10W
R7204	1-216-801-11	RES-CHIP	22	5%	1/10W
R7205	1-218-692-11	METAL CHIP	1K	0.50%	1/16W
R7206	1-216-809-11	RES-CHIP	100	5%	1/10W
R7207	1-216-809-11	RES-CHIP	100	5%	1/10W
R7208	1-216-809-11	RES-CHIP	100	5%	1/10W
R7209	1-216-809-11	RES-CHIP	100	5%	1/10W
R7210	1-216-803-11	RES-CHIP	33	5%	1/10W
R7221	1-216-821-11	RES-CHIP	1K	5%	1/10W
R7222	1-216-809-11	RES-CHIP	100	5%	1/10W
R7224	1-216-833-11	RES-CHIP	10K	5%	1/10W
R7225	1-216-845-11	RES-CHIP	100K	5%	1/10W
R7226	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R7228	1-216-864-11	SHORT CHIP	0		
R7231	1-216-864-11	SHORT CHIP	0		
R7232	1-216-841-11	RES-CHIP	47K	5%	1/10W
R7233	1-216-841-11	RES-CHIP	47K	5%	1/10W

HA

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	*	**A-1400-748-A**	**HA BOARD, MOUNTED**			

CAPACITOR

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	C1201	1-126-157-11	ELECT	10μF	20%	16V

CONNECTOR

	REF. NO.	PART NO.	DESCRIPTION	VALUES
*	CN1201	1-564-525-11	PLUG,CONNECTOR	10P

DIODE

REF. NO.	PART NO.	DESCRIPTION
D1201	8-719-053-43	DIODE SLR-325VCT31
D1202	8-719-053-43	DIODE SLR-325VCT31

IC

REF. NO.	PART NO.	DESCRIPTION
IC1201	8-742-129-00	HYB IC SBX1971-51P

RESISTOR

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R1201	1-247-807-31	CARBON	100	5%	1/4W
R1202	1-249-413-11	CARBON	470	5%	1/4W
R1203	1-249-415-11	CARBON	680	5%	1/4W
R1204	1-249-417-11	CARBON	1K	5%	1/4W
R1205	1-249-421-11	CARBON	2.2K	5%	1/4W
R1206	1-249-409-11	CARBON	220	5%	1/4W
R1207	1-249-409-11	CARBON	220	5%	1/4W
R1208	1-249-393-11	CARBON	10	5%	1/4W
R1209	1-249-433-11	CARBON	22K	5%	1/4W

SWITCH

REF. NO.	PART NO.	DESCRIPTION
S1201	1-572-198-11	SWITCH KEYBOARD
S1202	1-572-198-11	SWITCH KEYBOARD
S1203	1-572-198-11	SWITCH KEYBOARD
S1204	1-572-198-11	SWITCH KEYBOARD
S1205	1-572-198-11	SWITCH KEYBOARD
S1206	1-572-198-11	SWITCH KEYBOARD
S1207	1-572-198-11	SWITCH KEYBOARD

SR

The SR board is not field repairable. If service is required, use the following part number to order a complete replacement board. Data is provided for reference only.

	REF. NO.	PART NO.	DESCRIPTION	VALUES
*		**A-1400-759-A**	**SR BOARD, MOUNTED**	
			CONNECTOR	
*	CN9901	1-564-506-11	PLUG,CONNECTOR	3P
			DIODE	
	D9902	8-719-069-55	DIODE UDZSTE-175.6B	
			BATTERY	
	SB9901	1-756-295-11	BATTERY, SOLAR	

ACCESSORIES AND PACKING

	REF. NO.	PART NO.	DESCRIPTION	VALUES
		1-796-426-11	CD-ROM	
*		4-042-463-01	SHEET, PROTECTION	
*		4-076-420-01	BAG, PROTECTION	
		4-088-026-11	MANUAL, INSTRUCTION	
		4-088-026-21	MANUAL, INSTRUCTION (KP-57WV700/65WV700 ONLY)	
		4-088-026-31	MANUAL, INSTRUCTION (KP-65WV700 ONLY)	
*		4-088-440-01	CUSHION, UPPER (KP-57WV600/57WV700 ONLY)	
*		4-088-441-01	CUSHION, LOWER (KP-57WV700 ONLY)	
*		4-088-444-01	CUSHION, LOWER (KP-57WV600 ONLY)	
*		4-088-445-01	CUSHION, UPPER (KP-65WV600/65WV700 ONLY)	
*		4-088-446-01	CUSHION, LOWER (KP-65WV600/65WV700 ONLY)	
*		4-088-442-01	INDIVIDUAL, CARTON (KP-57WV600/57WV700 ONLY)	
*		4-088-447-01	INDIVIDUAL, CARTON (KP-65WV600/65WV700 ONLY)	
*		4-088-443-01	TRAY (KP-57WV600/57WV700 ONLY)	
*		4-088-448-01	TRAY (KP-65WV600/65WV700 ONLY)	
		1-468-681-11	REMOTE COMMANDER RM-Y188	
		4-081-888-01	BATTERY COVER (for RM-Y188)	

Sony Corporation
Sony Technology Center
Technical Services
Service Promotion Department

English
2002FJ74WEB-1
Printed in USA

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9-965-926-09

SERVICE MANUAL DA-4X CHASSIS

In an effort to reduce the size of this pdf file the tiled schematics are not attached to this Service Manual. To receive a complete set of the tiled schematics for this manual please submit a request to Nita Wardlaw at nita.wardlaw@am.sony.com.

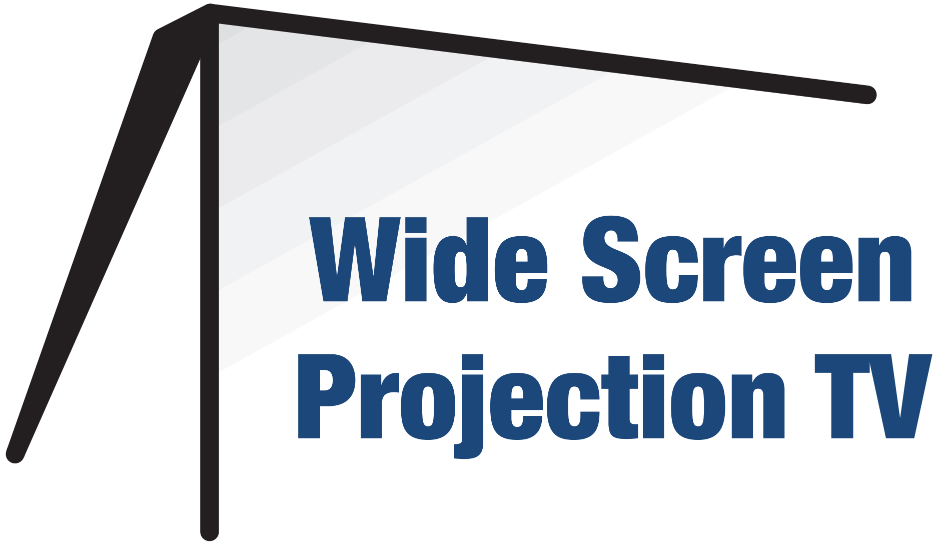
http://www.world.sony.com/

Sony Corporation

Printed in U.S.A.

SONY

4-088-026-11



Wide Screen Projection TV

Operating Instructions

© 2002 Sony Corporation

KP-57WV600 KP-65WV600
KP-57WV700 KP-65WV700

WARNING

To reduce the risk of fire or shock hazard, do not expose the projection TV to rain or moisture.

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

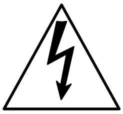
ATTENTION

RISQUE DE CHOC ELECTRIQUE,
NE PAS OUVRIR

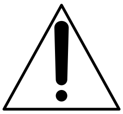
PRECAUCION

RIESGO DE CHOQUE ELECTRICO
NO ABRIR

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CAUTION

To prevent electric shock, do not use this polarized AC plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.

CAUTION

When using TV games, computers, and similar products with your projection TV, or viewing a TV station whose logo always stays on the screen, keep the brightness and contrast functions at low settings. If a fixed (non-moving) pattern such as a station logo is left on the screen for long periods of time, especially at a high brightness or contrast setting, the image can be permanently imprinted onto the screen. These types of imprints are not covered by your warranty.

Note on Caption Vision

This television receiver provides display of television closed captioning in accordance with §15.119 of the FCC rules.

Note on Convergence Adjustment

Before you use your projection TV, make sure to adjust convergence. For details, see "Adjusting the Convergence Automatically (Flash Focus)" on page 44.

Note to CATV System Installer

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the National Electrical Code (NEC) that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

Use of this television receiver for other than private viewing of programs broadcast on UHF or VHF or transmitted by cable companies for the use of the general public may require authorization from the broadcaster/cable company and/or program owner.

NOTIFICATION

This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference with radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antennas.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

Safety

- Operate the projection TV only on 120 V AC.
- The plug is designed, for safety purposes, to fit into the wall outlet only one way. If you are unable to insert the plug fully into the outlet, contact your dealer.
- If any liquid or solid object should fall inside the cabinet, unplug the projection TV immediately and have it checked by qualified service personnel before operating it further.
- If you will not be using the projection TV for several days, disconnect the power by pulling the plug itself. Never pull on the cord.
- For details concerning safety precautions, see "Important Safeguards" on page 3.

Installing

- To prevent internal heat buildup, do not block the ventilation openings.
- Do not install the projection TV in a hot or humid place, or in a place subject to excessive dust or mechanical vibration.
- Avoid operating the projection TV at temperatures below 5°C (41°F).
- If the projection TV is transported directly from a cold to a warm location, or if the room temperature changes suddenly, the picture may be blurred or show poor color due to moisture condensation. In this case, please wait a few hours to let the moisture evaporate before turning on the projection TV.
- To obtain the best picture, do not expose the screen to direct illumination or direct sunlight. It is recommended to use spot lighting directed down from the ceiling or to cover the windows that face the screen with opaque drapery. It is desirable to install the projection TV in a room where the floor and walls are not of a reflective material.

As an ENERGY STAR® Partner, Sony has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

ENERGY STAR® is a U.S. registered mark.

CAUTION

How to reduce the risk of "Image Retention" on your Projection TV

Bright, stationary images such as TV station logos displayed on your TV can cause permanent damage to your TV, resulting in retention of the image in the picture. Please take the following steps to reduce the risk of causing image retention:

View a variety of program sources or programming material.

Image retention can occur when bright stationary images such as TV station logos are viewed. Changing the program material viewed reduces the possibility that a single image will become imprinted on the picture tubes in your TV.

When viewing programs with stationary images, adjust the picture setting to reduce the "Picture" and "Brightness" levels. Image retention is accelerated by higher "Brightness" and higher "Picture" settings.

Please see page 72 for instructions on adjusting picture settings.

This will help you reduce the risk of causing image retention.

IMAGE RETENTION IS NOT COVERED BY YOUR WARRANTY

Trademark Information

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BBE and BBE Symbol are trademarks of BBE Sound, Inc. and are licensed by BBE Sound, Inc. under U.S. Patent No. 4,638,258 and 4,482,866.

Steady Sound, Digital Reality Creation, Caption Vision, CineMotion, Memory Stick, and Twin View are registered trademarks of Sony Corporation. ClearEdge VM, HD Detailer, and Uniform Brightness Screen are trademarks of Sony Corporation.

Owner's Record

The model and serial numbers are located at the rear of the projection TV, below the Sony logo, on the sticker, and also on the TV box (white label). Record these numbers in the spaces provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. ______________________________

Serial No. ______________________________

IMPORTANT SAFEGUARDS

For your protection, please read these instructions completely, and keep this manual for future reference.

Carefully observe and comply with all warnings, cautions and instructions placed on the set or described in the operating instructions or service manual.

WARNING

To guard against injury, the following basic safety precautions should be observed in the installation, use and servicing of the set.

Use

Power Sources

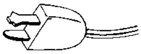
This set should be operated only from the type of power source indicated on the serial/model plate. If you are not sure of the type of electrical power supplied to your home, consult your dealer or local power company. For those sets designed to operate from battery power, refer to the operating instructions.

Grounding or Polarization

This set is equipped with a polarized AC power cord plug (a plug having one blade wider than the other), or with a three-wire grounding type plug (a plug having a third pin for grounding).Follow the instructions below:

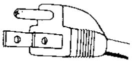
For the set with a polarized AC power cord plug

This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug still fails to fit, contact your electrician to have a suitable outlet installed. Do not defeat the safety purpose of the polarized plug by forcing it in.



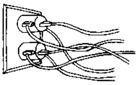
For the set with a three-wire grounding type AC plug

This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to have a suitable outlet installed. Do not defeat the safety purpose of the grounding plug.

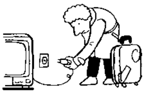


Overloading

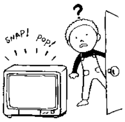
Do not overload wall outlets, extension cords or convenience receptacles beyond their capacity, since this can result in fire or electric shock.



Always turn the set off when it is not being used. When the set is left unattended and unused for long periods of time, unplug it from the wall outlet as a precaution against the possibility of an internal malfunction that could create a fire hazard.

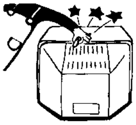


If a snapping or popping sound from a TV set is continuous or frequent while the TV is operating, unplug the TV and consult your dealer or service technician. It is normal for some TV sets to make occasional snapping or popping sounds, particularly when being turned on or off.



Object and Liquid Entry

Never push objects of any kind into the set through the cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the set.



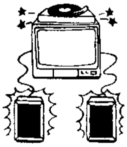
Cleaning

Clean the cabinet of the projection TV with a dry soft cloth. To remove dust from the screen, wipe it gently with a soft cloth. Stubborn stains may be removed with a cloth slightly dampened with a solution of mild soap and warm water. Never use strong solvents such as thinner or benzine for cleaning.

If the picture becomes dark after using the projection TV for a long period of time, it may be necessary to clean the inside of the projection TV. Consult qualified service personnel.

Attachments

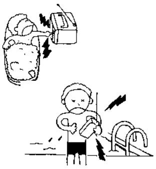
Do not use attachments not recommended by the manufacturer, as they may cause hazards.



Installation

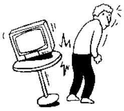
Water and Moisture

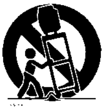
Do not use power-line operated sets near water — for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, etc.



Accessories

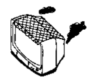
Do not place the set on an unstable cart, stand, table or shelf. The set may fall, causing serious injury to a child or an adult and serious damage to the set. Use only a cart or stand recommended by Sony for the specific model of TV. No part of the TV set should overhang any edge of the TV cart or stand; any overhanging edge is a safety hazard. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.



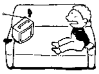


Ventilation

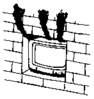
The slots and openings in the cabinet and in the back or bottom are provided for necessary ventilation. To ensure reliable operation of the set, and to protect it from overheating, these slots and openings must never be blocked or covered.



- ☐ Never cover the slots and openings with a cloth or other materials.



- ☐ Never block the slots and openings by placing the set on a bed, sofa, rug or other similar surface.

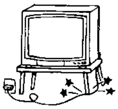


- ☐ Never place the set in a confined space, such as a bookcase or built-in cabinet, unless proper ventilation is provided.

- ☐ Do not place the set near or over a radiator or heat register, or where it is exposed to direct sunlight.

Power-Cord Protection

Do not allow anything to rest on or roll over the power cord, and do not place the set where the power cord is subject to wear or abuse.



Antennas

Outdoor Antenna Grounding

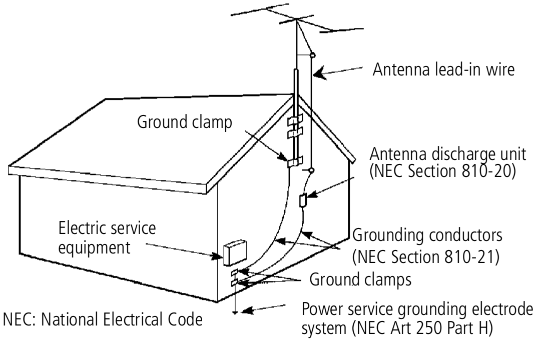
If an outdoor antenna is installed, follow the precautions below. An outdoor antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can come in contact with such power lines or circuits.

WHEN INSTALLING AN OUTDOOR ANTENNA SYSTEM, EXTREME CARE SHOULD BE TAKEN TO KEEP FROM CONTACTING SUCH POWER LINES OR CIRCUITS AS CONTACT WITH THEM IS ALMOST INVARIABLY FATAL.

Be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges.

Section 810 of the National Electrical Code (NEC) in USA and Section 54 of the Canadian Electrical Code in Canada provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

Antenna Grounding According to the National Electrical Code, ANSI/NFPA 70


Antenna lead-in wire
Ground clamp
Antenna discharge unit (NEC Section 810-20)
Electric service equipment
Grounding conductors (NEC Section 810-21)
Ground clamps
NEC: National Electrical Code
Power service grounding electrode system (NEC Art 250 Part H)

Lightning

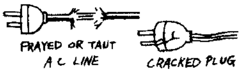
For added protection for this television receiver during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna. This will prevent damage to the receiver due to lightning and power-line surges.

Service

Damage Requiring Service

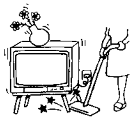
Unplug the set from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- ☐ When the power cord or plug is damaged or frayed.

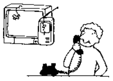

FRAYED OR TAUT A C LINE
CRACKED PLUG

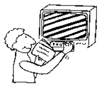
- ☐ If liquid has been spilled into the set.
- ☐ If the set has been exposed to rain or water.

- ☐ If the set has been subject to excessive shock by being dropped, or the cabinet has been damaged.



- ☐ If the set does not operate normally when following the operating instructions. Adjust only those controls that are specified in the operating instructions. Improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the set to normal operation.





- ☐ When the set exhibits a distinct change in performance, it indicates a need for service.

Servicing

Do not attempt to service the set yourself since opening the cabinet may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

Replacement Parts

When replacement parts are required, be sure the service technician certifies in writing that he has used replacement parts specified by the manufacturer that have the same characteristics as the original parts.

Unauthorized substitutions may result in fire, electric shock or other hazards.

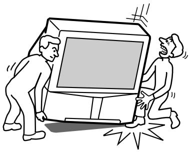
TV SERVICE DEPT.
ALL SETS RECEIVE OUR OK SAFETY CHECK

Safety Check

Upon completion of any service or repairs to the set, ask the service technician to perform routine safety checks (as specified by the manufacturer) to determine that the set is in safe operating condition, and to so certify. When the set reaches the end of its useful life, improper disposal could result in a picture tube implosion. Ask a qualified service technician to dispose of the set.

For Safety

Be careful when moving the projection TV



When you place the projection TV in position, be careful not to drop it on your foot or fingers.

Watch your footing while installing the projection TV.

Carry the projection TV in the specified manner

If you carry the projection TV in a manner other than the specified manner and without the specified number of persons, it may drop and a serious injury may be caused. Be sure to follow the instructions mentioned below.

- ☐ Carry the projection TV with the specified number of persons (see "Carrying Your Projection TV" on page 12).
- ☐ Do not carry the projection TV holding the speaker grill.
- ☐ Hold the projection TV tightly when carrying it.

The projection TV includes handles that you can use to carry the unit.

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Introducing the Projection TV

Welcome

Thank you for purchasing the Sony Projection TV. This manual is to be used with the following models:

- KP-57WV600
- KP-65WV600
- KP-57WV700
- KP-65WV700

Package Contents

Along with your new projection TV, the package contains a remote control and two AA batteries. No additional cables are included. These items are all you need to set up and operate the projection TV in its basic configuration.

Most components (VCRs, DVD players, etc.) come with the necessary cables to connect them. If you want to set up a complex system, you may need to buy extra cables, connectors, etc. Be sure to have these on hand before you start to connect your system.

Features

Some of the features that you will enjoy with your new TV include:

- **Wide Screen Mode:** Watch conventional 4:3 aspect ratio broadcasts in wide screen (16:9) mode.
- **DRC® (Digital Reality Creation) Multifunction V1:** Unlike conventional line doublers, the DRC Multifunction feature replaces the signal's NTSC waveform with the near-HD equivalent, while doubling the number of vertical and horizontal lines. This results in four times the density for quality sources, such as DVD, satellite, and digital camcorders. The Video Menu allows you to select interlaced, progressive, or CineMotion™ output. The DRC Palette option lets you customize the level of detail (Reality) and smoothness (Clarity) to create up to three custom palettes.
- **Scrolling Index:** Lets you preview and select programs from a scrolling index of video pictures.
- **Favorite Channels**: Allows you to preview and select from eight of your favorite channels.

- **Twin View™:** Using the Multi-Image Driver (MIDX), Twin View allows you to watch two programs side by side, with the ability to zoom in one picture. You can watch pictures from two different sources (1080i, 720p, 480p, and 480i) simultaneously. (Only the left Twin View window can display 1080i, 720p, and 480p sources.)
- **ClearEdge VM™ Velocity Modulation:** Sharpens picture definition by enhancing vertical lines.
- **Uniform Brightness Screen™** *(KP-57/65WV700 only)***:** Special optical technology expands the vertical viewing angle to nearly double that of other rear projection televisions.
- **Steady Sound®:** Equalizes volume levels so there is consistent output between programs and commercials.
- **Memory Stick® Picture Viewer:** Allows you to view on your TV screen digital images that are stored on Memory Stick media.
- **Component Video Inputs:** Offers the best video quality for DVD (480p, 480i), and digital set-top box (HD1080i, 720p) connections.
- **HD Detailer™:** Wideband video amplifier has a high bandwidth frequency rating, which allows it to send more video information to the screen, resulting in finer picture quality, especially for HD sources.
- **CineMotion™:** Reverse 3-2 pulldown processing provides optimal picture quality for film-based sources (media originally shot in 24 frames-per-second format).
- **Parental Control:** V-Chip technology allows parents to block unsuitable programming from younger viewers.
- **Digital Visual Interface (DVI):** Can accommodate a copy-protected digital connection (HDCP[*]) to other devices (such as digital set-top boxes) that have compatible interfaces. The DVI-HDTV input terminal is compliant with the EIA-861 standard and is not intended for use with personal computers.

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[*] High-bandwidth Digital Content Protection

Setting Up the TV

Overview

This chapter includes illustrated instructions for setting up your TV.

Topic	Page(s)
Carrying Your Projection TV	12
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TV Controls and Connectors	13-17
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Connecting Optional Equipment	
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Audio Receiver	41
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Setting Up the Channel List	43
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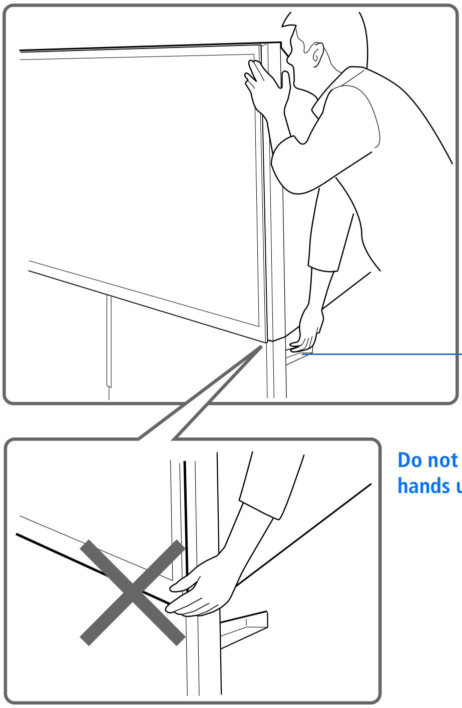
Adjusting the Convergence Manually	45

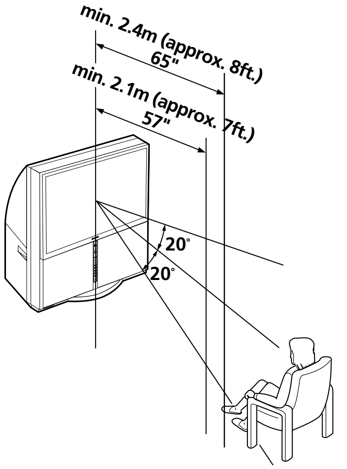
Carrying Your Projection TV

Carrying the TV requires four or more people. The TV is equipped with casters for easy movement on a hard surface. Be sure to move your projection TV using the casters. The TV includes handles that you can use to carry the unit.

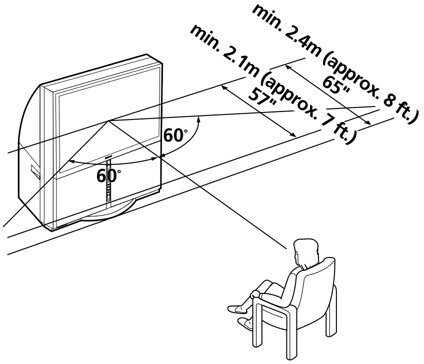

Handle (one on each side)

Do not carry the TV by placing hands under the front screen

Installing the TV


min. 2.4m (approx. 8ft.)
65"
min. 2.1m (approx. 7ft.)
57"
20°
20°

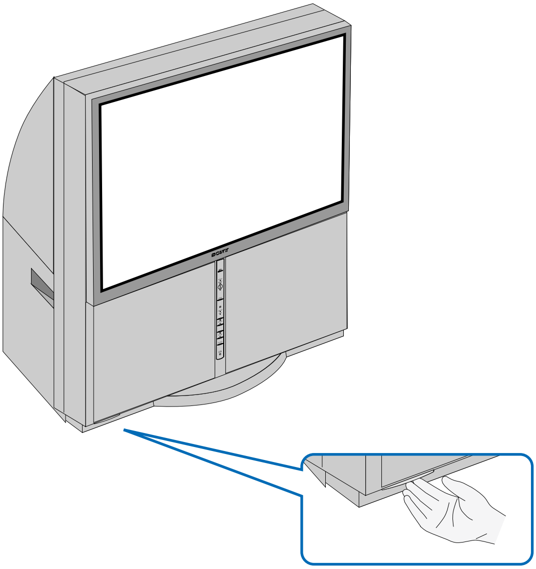
Recommended Vertical Viewing Angle


min. 2.4m (approx. 8 ft.)
65"
min. 2.1m (approx. 7 ft.)
57"
60°
60°

Recommended Horizontal Viewing Angle

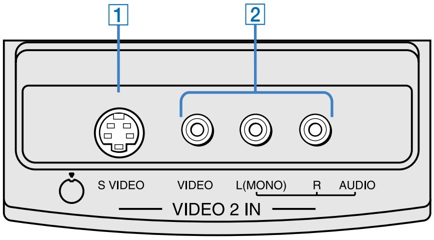
TV Controls and Connectors

To access the front video panel, push up and then release. The panel drops down automatically (KP-57/65WV700 shown).



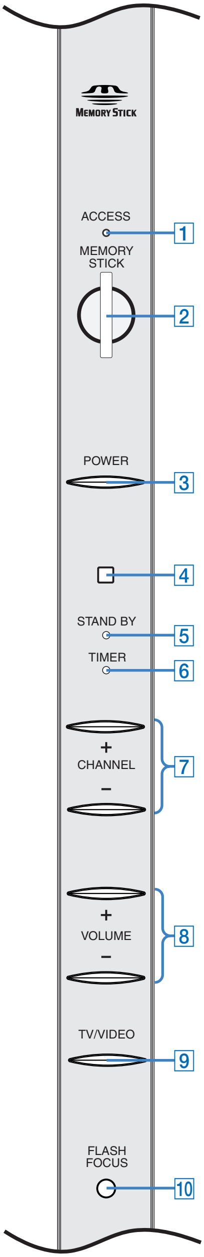
Push up
and release

Front Video Controls



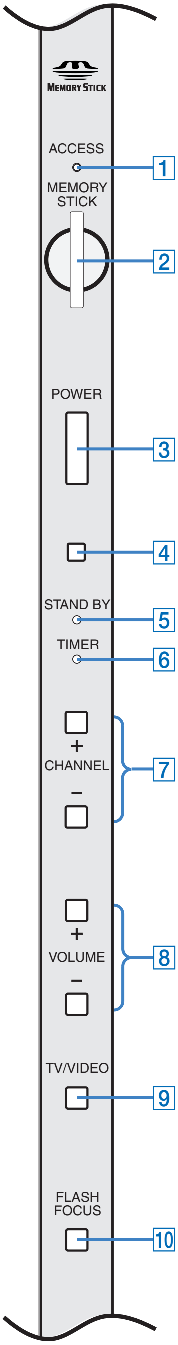
1	S VIDEO VIDEO 2 INPUT	Connects to the S VIDEO OUT jack on your camcorder or other video equipment that has S VIDEO. Provides better picture quality than composite video (2).
2	VIDEO/L(MONO)-AUDIO-R VIDEO 2 INPUT	Connects to the composite A/V output jacks on your camcorder or other video equipment.

KP-57/65WV600 Front Panel



Item		Description
1	MEMORY STICK ACCESS LED	When lit, indicates that the Memory Stick is being read. (Do not remove the Memory Stick when the indicator is lit.)
2	MEMORY STICK	Memory Stick insertion slot. For details, see "Inserting and Removing a Memory Stick" on page 66.
3	POWER	Press to turn on and off the TV.
4	Infrared Receiver (IR)	Receives IR signals from the TV's remote control.
5	STAND BY LED	Blinks when the TV is turned on, then shuts off when the picture is displayed. If the LED blinks continuously, this may indicate the TV needs service (see "Contacting Sony" on page 90).
6	TIMER LED	When lit, indicates one of the timers is set. When the timer is set, this LED will remain lit even if the TV is turned off. For details, see page 84.
7	-CHANNEL+	Press to scan through channels. To scan quickly through channels, press and hold down either CHANNEL button.
8	-VOLUME +	Press to adjust the volume.
9	TV/VIDEO	Press repeatedly to cycle through the video equipment connected to the TV's video inputs.
10	FLASH FOCUS	Press to adjust the convergence (see page 44).

KP-57/65WV700 Front Panel



Item		Description
1	MEMORY STICK ACCESS LED	When lit, indicates that the Memory Stick is being read. (Do not remove the Memory Stick when the indicator is lit.)
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3	POWER	Press to turn on and off the TV.
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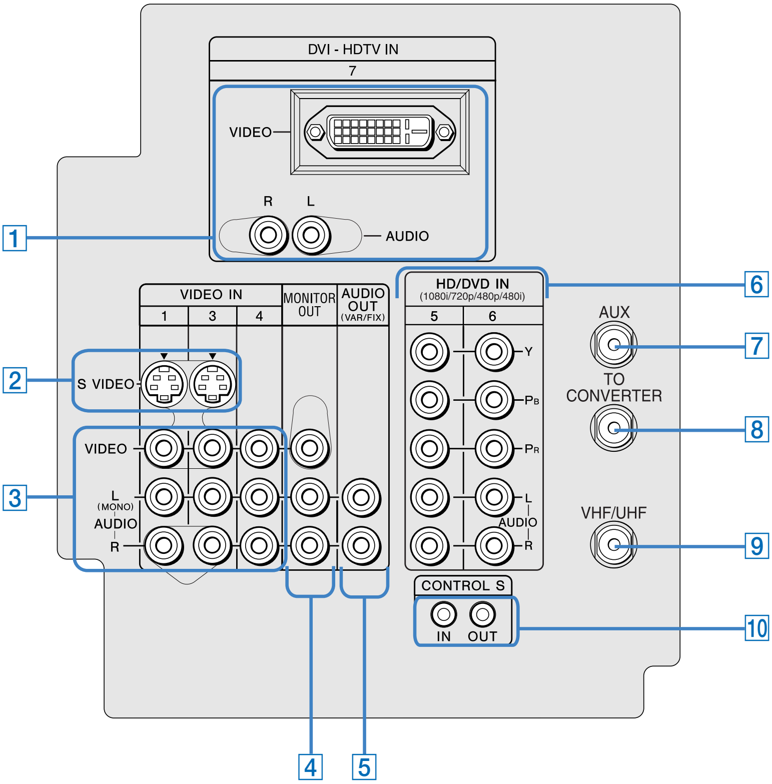
8	-VOLUME +	Press to adjust the volume.
9	TV/VIDEO	Press repeatedly to cycle through the video equipment connected to the TV’s video inputs.
10	FLASH FOCUS	Press to adjust the convergence (see page 44).

Rear Panel


DVI - HDTV IN
7
VIDEO
R
L
AUDIO
VIDEO IN
1
3
4
MONITOR OUT
AUDIO OUT (VAR/FIX)
HD/DVD IN (1080i/720p/480p/480i)
5
6
S VIDEO
VIDEO
L (MONO)
AUDIO
R
Y
PB
PR
L
AUDIO
R
AUX
TO CONVERTER
VHF/UHF
CONTROL S
IN
OUT
1
2
3
4
5
6
7
8
9
10

Jack	*Description*
1 DVI-HDTV VIDEO AUDIO R/L (VIDEO 7 IN)	Can accommodate a copy-protected digital connection (HDCP*) to other devices (such as digital set-top boxes) that have compatible interfaces. The DVI-HDTV input terminal is compliant with the EIA-861 standard and is not intended for use with personal computers. See the instruction manual that came with your equipment for details about connecting and using it with the TV.
2 S VIDEO IN 1/3	Connects to the S VIDEO OUT jack of your VCR or other video equipment that has S VIDEO. S VIDEO provides better picture quality than either composite video (3) or VHF/UHF (9) connections.
3 VIDEO IN 1/3/4 VIDEO/L(MONO) -AUDIO-R	Connect to the composite A/V output jacks on your VCR or other video component. A fourth component A/V input jack (VIDEO 2) is located on the front panel of the TV. These video connections provide better picture quality than the VHF/UHF (9) connections.
4 MONITOR OUT	Lets you record the program you are watching to a VCR. When two VCRs are connected, you can use the TV as a monitor for tape-to-tape editing (not available with 480p, 720p, or 1080i when the input is set to VIDEO 5-7).
5 AUDIO OUT (VAR/FIX) L (MONO)/R	Connects to the left and right audio input jacks of your audio or video equipment. You can use these outputs to listen to your TV's audio through your stereo system.
6 HD/DVD IN 5/6 (1080i/720p/480p/480i)	Connect to your DVD player's or digital set-top box's component video (Y, PB, PR) and audio (L/R) jacks. Component video provides better picture quality than 2, 3, or 9).
7 AUX	Auxiliary RF input that connects to your antenna, CATV cable, or cable box output jack. This is convenient if you are using two VHF/UHF sources (antenna, CATV cable, or cable box). For details, see pages 20 to 23.
8 TO CONVERTER	Connects to your cable box input jack. This VHF/UHF output jack lets you set up your TV to switch between scrambled channels (coming through a cable box) and unscrambled cable channels. Use this jack instead of a splitter to get better picture quality when you need to switch between scrambled and unscrambled cable channels. For details, see pages 22 to 23.
9 VHF/UHF	Primary RF input that connects to your VHF/UHF antenna or cable.
10 CONTROL S IN/OUT	Allows the TV to receive (IN) and send (OUT) remote control signals to other Sony infrared-controlled audio or video equipment that has the CONTROL S function.

*High-bandwidth Digital Content Protection

Basic Connections: Connecting a Cable or Antenna

The way in which you will connect your TV varies, depending on how your home receives a signal (cable, cable box, antenna) and whether or not you plan to connect a VCR.

If You Are Connecting	See Page
Cable or Antenna Only ❑ No cable box or VCR	19
Cable and Antenna Only ❑ No cable box or VCR	20
Cable Box and Cable Only ❑ Cable box unscrambles only some channels (usually premium channels) ❑ No VCR	22
Cable Box Only ❑ Cable box unscrambles all channels ❑ No VCR	24

If you are connecting a VCR

❑ See the connections described on pages 26 and 28.

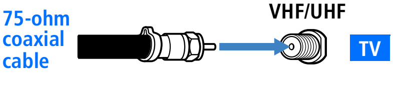
Cable or Antenna Only

For best results, use one of the following connections if you are connecting a cable or an antenna and you:

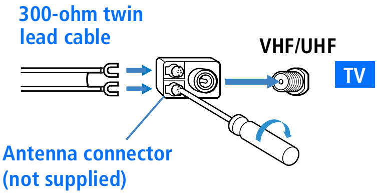
- ☐ Do not need a cable box to unscramble channels. (If you have a cable box, see pages 22-24.)
- ☐ Do not intend to connect a VCR. (If you have a VCR, see pages 26 and 28.)

The connection you choose depends on the cable type you have in your home, as described below.

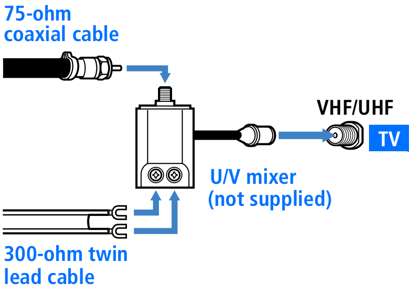
75-ohm coaxial cable (usually found in newer homes)

Cable Type	***Connect As Shown***
VHF Only or combined VHF/UHF or Cable	 75-ohm coaxial cable VHF/UHF TV

300-ohm twin lead cable (usually found in older homes)

Cable Type	***Connect As Shown***
VHF Only or UHF Only or combined VHF/UHF	 300-ohm twin lead cable VHF/UHF TV Antenna connector (not supplied)

75-ohm coaxial and 300-ohm twin lead cable (found in some homes)

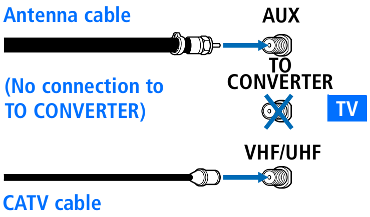
Cable Type	***Connect As Shown***
VHF and UHF	 75-ohm coaxial cable VHF/UHF TV U/V mixer (not supplied) 300-ohm twin lead cable

Cable and Antenna Only

For best results, use this connection if you:

- Have a cable and an antenna.

  (This is convenient if you are using a separate rooftop antenna to receive additional channels that are not provided by your cable company.)
- Do not have a cable box or VCR. (If you have a cable box, see pages 22 to 24. If you have a VCR, see pages 26 and 28.)

Cable Type	*Connect As Shown*
Cable TV (CATV) and Antenna	 Antenna cable AUX TO CONVERTER (No connection to TO CONVERTER) TV VHF/UHF CATV cable

About Using This Connection with Dual Picture (Twin View, etc.) Features

With this connection, you cannot view antenna channels in the right dual picture window.

Notes on Using This Connection

To Do This ...	*Do This ...*
Switch the TV's input between the cable and antenna	Press ANT to switch back and forth between the TV's VHF/UHF and AUX inputs.
Receive channels using an antenna, instead of the cable	1 Press ANT to switch to the AUX input. 2 Set the Cable option to Off. For details, see "Selecting Channel Options" on page 78. 3 Run the Auto Setup program, as described in "Using Auto Setup" on page 43.

Cable Box and Cable Only

For best results, use this connection if:

☐ Your cable company scrambles some channels, such as premium channels (which requires you to use a cable box), but does not scramble all channels.

☐ You do not have a VCR. (If you have a VCR, see pages 26 and 28.)

With this connection you can:

☐ Use the TV remote control to change channels coming through the cable box to the TV's AUX input jack. (You must first program the remote control for your specific cable box; see "Programming the Remote Control" on page 51.)

☐ Use the TV remote control to change channels coming directly into the TV's VHF/UHF input. (The TV's tuner provides a better signal than the cable box.)

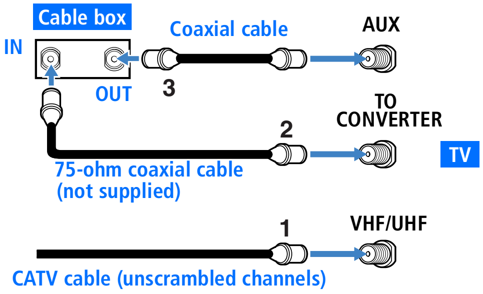
About Using This Connection with Dual Picture (Twin View, etc.) Features

With this connection, you can use all the dual picture features for unscrambled channels coming directly into the TV's VHF/UHF input jack.

However, you can use only some of the dual picture features for channels coming through the cable box to the TV's AUX input jack. For example, when you switch the TV's input to AUX — to select the cable box input — the picture displays only in the left window. For example, if you turn on Twin View, you can watch cable channels coming into the VHF/UHF jack in the right window, but you cannot swap the pictures between the left and right windows.

To connect the cable box and cable

1. Connect the cable from your cable company to the TV's VHF/UHF jack.
2. Use a coaxial cable to connect the TV's TO CONVERTER jack to the cable box's input jack. (The TV's internal converter lets you switch between unscrambled signals coming straight into the TV and scrambled signals coming in through the cable box, eliminating the need for an external splitter.)
3. Use a coaxial cable to connect the cable box's output jack to the TV's AUX jack.
4. Run the Auto Setup program, as described in "Setting Up the Channel List" on page 43.


Cable box
IN
OUT
Coaxial cable
3
AUX
TO CONVERTER
2
TV
75-ohm coaxial cable (not supplied)
1
VHF/UHF
CATV cable (unscrambled channels)

Notes on Using This Connection

To Do This ...	*Do This ...*
Use the cable box	Tune the TV to the channel the cable box is set to (usually channel 3 or 4) and then use the cable box to switch channels.
Set up the TV remote control to operate the cable box	Program the remote control. See "Programming the Remote Control" on pages 51-52.
Activate the remote control to operate the cable box	Press SAT/CABLE FUNCTION.
Prevent the accidental switching of TV channels	When using the cable box, you need the TV to stay on the channel the cable box is set to (usually channel 3 or 4). You can use the TV's Channel Fix feature to lock in a specific channel. For details, see "Using the Channel Menu" on page 78.
Switch the TV's input between the cable box and cable	Press ANT to switch back and forth between the TV's VHF/UHF (unscrambled channels) and AUX (scrambled) inputs.

Cable Box Only

For best results, use this connection if:

- ☐ Your cable company scrambles all channels, which requires you to use a cable box.
- ☐ You do not have a VCR. (If you have a VCR, see pages 26 and 28.)

With this connection you can:

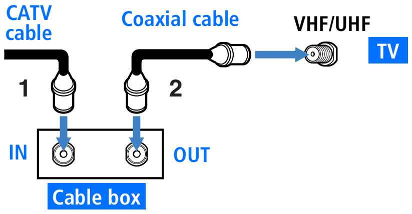
- ☐ Use the TV remote control to change channels coming through the cable box to the TV's VHF/UHF jack. (You must first program the remote control for your specific cable box.)

About Using This Connection with Dual Picture (Twin View, etc.) Features

With this connection, all channels come into the TV through your cable box and only one unscrambled signal is sent to the TV, so you cannot use the dual picture features. If some of your channels are scrambled, but others are not, consider using the "Cable Box and Cable" connection on page 22 instead.

To connect the cable box

1. Connect the CATV cable to the cable box's input jack.
2. Use a coaxial cable to connect the cable box's output jack to the TV's VHF/UHF jack.
3. Run the Auto Setup program, as described in "Setting Up the Channel List" on page 43.



Notes on Using This Connection

To Do This ...	*Do This ...*
Use the cable box	Tune the TV to the channel the cable box is set to (usually channel 3 or 4) and then use the cable box to switch channels.
Set up the TV remote control to operate the cable box	Program the remote control. See "Programming the Remote Control" on pages 51-52.
Activate the remote control to operate the cable box	Press SAT/CABLE FUNCTION.
Prevent the accidental switching of TV channels	When using the cable box, you need the TV to stay on the channel the cable box is set to (usually channel 3 or 4). You can use the TV's Channel Fix feature to lock in a specific channel. For details, see "Using the Channel Menu" on page 78.

Connecting Optional Equipment

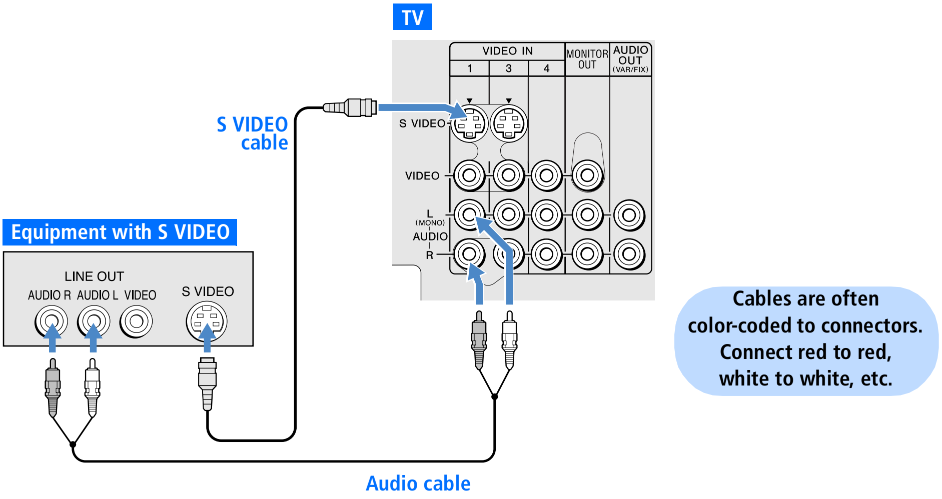
Use the directions in this section to connect the following optional equipment:

If You Are Connecting	*See Page*
VCR and Cable	26
VCR and Cable Box	28
Two VCRs for Tape Editing	30
Satellite Receiver	32
Satellite Receiver and VCR	34
DVD Player with Component Video Connectors	36
DVD Player with S VIDEO and Audio Connectors	38
Camcorder	40
Audio Receiver	41

About Using S VIDEO

If the optional equipment you are connecting has an S VIDEO jack (shown at left), you can use an S VIDEO cable for improved picture quality (compared to an A/V cable). Because S VIDEO carries only the video signal, you also need to connect audio cables for sound, as shown below.

Example of an S VIDEO Connection


TV
VIDEO IN
1
3
4
MONITOR OUT
AUDIO OUT (VAR/FIX)
S VIDEO
VIDEO
L (MONO) AUDIO R
S VIDEO cable
Equipment with S VIDEO
LINE OUT
AUDIO R
AUDIO L
VIDEO
S VIDEO
Audio cable

Cables are often color-coded to connectors. Connect red to red, white to white, etc.

VCR and Cable

Using S VIDEO jacks? See page 25.

For best results, use this connection if:

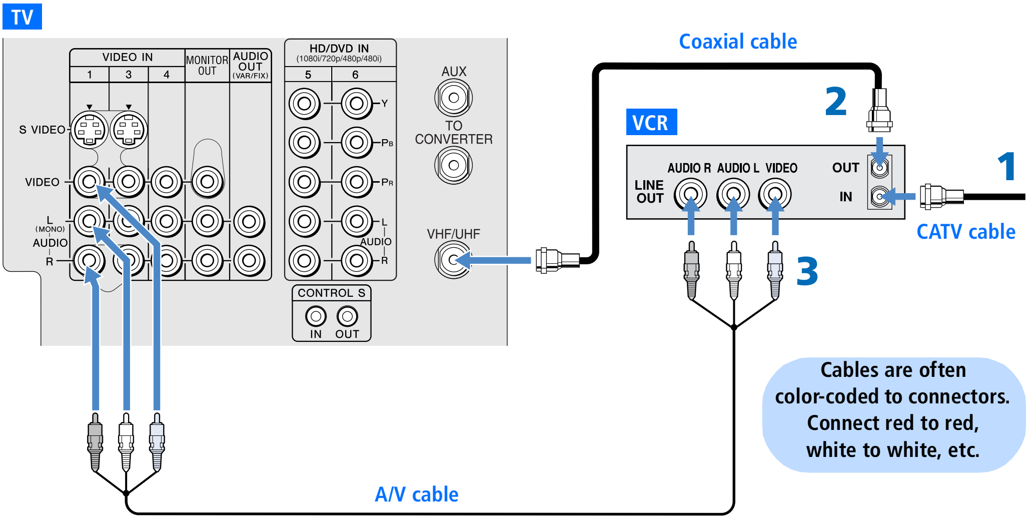
- ❑ Your cable company does not require you to use a cable box.

About Using This Connection with Dual Picture (Twin View, etc.) Features

With this connection, you can use all the dual picture features.

To connect the VCR and cable

1. Connect the CATV cable to the VCR's VHF/UHF input jack.
2. Use a coaxial cable to connect the VCR's VHF/UHF output jack to the TV's VHF/UHF jack.
3. Use an A/V cable to connect the VCR's A/V output jacks to the TV's A/V input jacks.
4. Run the Auto Setup program, as described in "Setting Up the Channel List" on page 43.


TV
VIDEO IN
1
3
4
MONITOR OUT
AUDIO OUT (VAR/FIX)
HD/DVD IN (1080i/720p/480p/480i)
5
6
S VIDEO
VIDEO
L (MONO)
AUDIO
R
Y
PB
PR
L
AUDIO
R
AUX
TO CONVERTER
VHF/UHF
CONTROL S
IN
OUT
Coaxial cable
VCR
2
AUDIO R
AUDIO L
VIDEO
LINE OUT
OUT
IN
1
CATV cable
3
A/V cable

Cables are often color-coded to connectors. Connect red to red, white to white, etc.

Notes on Using This Connection

To Do This ...	*Do This ...*
Watch the VCR	Press TV/VIDEO repeatedly to select the VCR input (VIDEO 1 in the illustration).
Watch cable channels	Press TV/VIDEO repeatedly to select the cable input (VHF/UHF in the illustration).
Set up the TV remote control to operate the VCR	If you have a non-Sony VCR, you must program the remote control. See “Programming the Remote Control” on pages 51-52.
Activate the TV remote control to operate the VCR	Open the outside cover, as shown on page 50. Then set the A/V slide switch to the position you programmed for the VCR.
Control VCR functions with the TV remote control	See “Operating a VCR” on page 53.
Label video inputs to easily identify equipment connected to the TV	See the instructions for setting up Video Labels on pages 83-84.

VCR and Cable Box

For best results, use this connection if:

- Your cable company scrambles some channels, such as premium channels (which requires you to use a cable box), but does not scramble all channels.

About Using This Connection with Dual Picture (Twin View, etc.) Features

With this connection, you can use all the dual picture features.

With this connection you can:

- Use the TV remote control to change channels coming through the cable box. (You must first program the remote control for your specific cable box; see “Programming the Remote Control” on page 51.)
- Use the TV remote control to change channels coming directly into the TV’s VHF/UHF jack. (The TV’s tuner provides a better signal than the cable box.)
- Record channels coming through the cable box and channels coming directly into the TV.

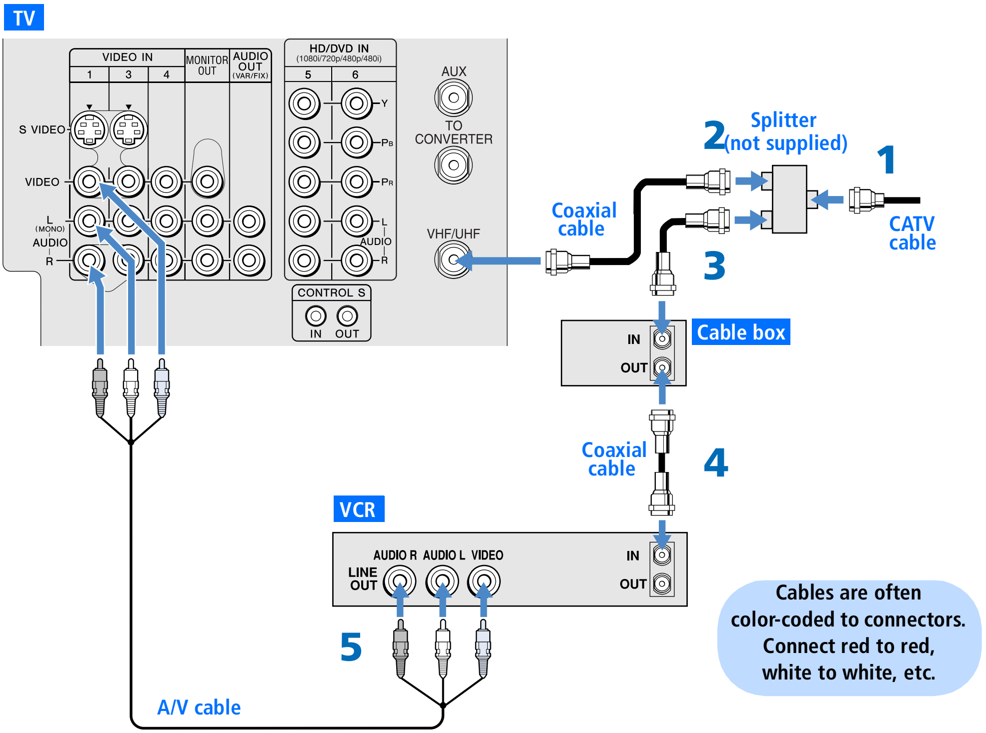
To connect a VCR and cable box, you need:

- A splitter, which is a small, inexpensive device that you can purchase at your local electronics store.
- Three coaxial cables.
- One A/V cable or one S VIDEO cable with audio cables.

To connect the VCR and cable box

1. Connect the CATV cable to the single (input) jack of the splitter.
2. Use a coaxial cable to connect one of the splitter’s two output jacks to the TV’s VHF/UHF jack.
3. Use a coaxial cable to connect the splitter’s other output jack to the cable box’s input jack.
4. Use a coaxial cable to connect the cable box’s output jack to the VCR’s RF input jack.
5. Use an A/V cable to connect the VCR’s A/V output jacks to the TV’s A/V input jacks.
6. Run the Auto Setup program, as described in “Setting Up the Channel List” on page 43.

Using
S VIDEO jacks?
See page 25.


TV
VIDEO IN
1
3
4
MONITOR OUT
AUDIO OUT (VAR/FIX)
HD/DVD IN (1080i/720p/480p/480i)
5
6
S VIDEO
VIDEO
L (MONO)
AUDIO
R
Y
PB
PR
L
AUDIO
R
AUX
TO CONVERTER
VHF/UHF
CONTROL S
IN
OUT
Coaxial cable
2
Splitter (not supplied)
1
CATV cable
3
Cable box
IN
OUT
Coaxial cable
4
VCR
AUDIO R
AUDIO L
VIDEO
LINE OUT
IN
OUT
5
A/V cable

Cables are often color-coded to connectors. Connect red to red, white to white, etc.

Notes on Using This Connection

To Do This ...	*Do This ...*
Watch cable (unscrambled) channels	Press TV/VIDEO repeatedly to select the cable input (UHF/VHF in the illustration).
Watch cable box (scrambled) channels	Turn on the VCR and tune it to the channel the cable box is set to (usually channel 3 or 4). Press TV/VIDEO repeatedly to select the VCR input (VIDEO 1 in the illustration). Use the cable box to change channels.
Watch the VCR	Press TV/VIDEO repeatedly to select the VCR input (VIDEO 1 in the illustration).
Set up the TV remote control to operate the cable box or VCR	If you have a non-Sony VCR, you must program the remote control. See “Programming the Remote Control” on pages 51-52.
Activate the remote control to operate the cable box or VCR	For the cable box, press SAT/CABLE FUNCTION. For the VCR, open the outside cover, as shown on page 50. Then set the A/V slide switch to the position you programmed for the VCR.
Control specific cable box and VCR functions with the TV remote control	See “Operating a Cable Box” on page 54 and “Operating a VCR” on page 53.
Label video inputs to easily identify equipment connected to the TV	See the instructions for setting up Video Labels on pages 83-84.

Two VCRs for Tape Editing

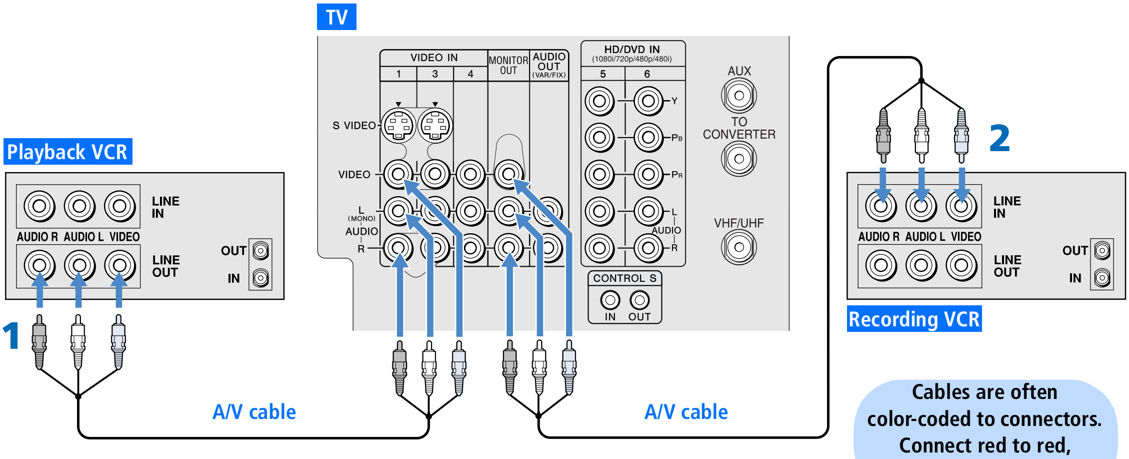
Using S VIDEO jacks? See page 25.

Connecting two VCRs lets you record from one VCR to the other. By connecting them as shown below, you can view (monitor) what is being recorded.

To connect two VCRs for tape editing

1 Use an A/V cable to connect the playback VCR's A/V output jacks to the TV's A/V input jacks.

2 Use an A/V cable to connect the recording VCR's A/V input jacks to the TV's MONITOR OUT jacks.


TV
VIDEO IN
1
3
4
MONITOR OUT
AUDIO OUT (VAR/FIX)
HD/DVD IN (1080i/720p/480p/480i)
5
6
S VIDEO
VIDEO
L (MONO)
AUDIO
R
Y
PB
PR
L
AUDIO
R
AUX
TO CONVERTER
VHF/UHF
CONTROL S
IN
OUT
Playback VCR
LINE IN
AUDIO R
AUDIO L
VIDEO
LINE OUT
OUT
IN
1
A/V cable
A/V cable
2
LINE IN
AUDIO R
AUDIO L
VIDEO
LINE OUT
OUT
IN
Recording VCR

Cables are often color-coded to connectors. Connect red to red, white to white, etc.

Notes on Using This Connection

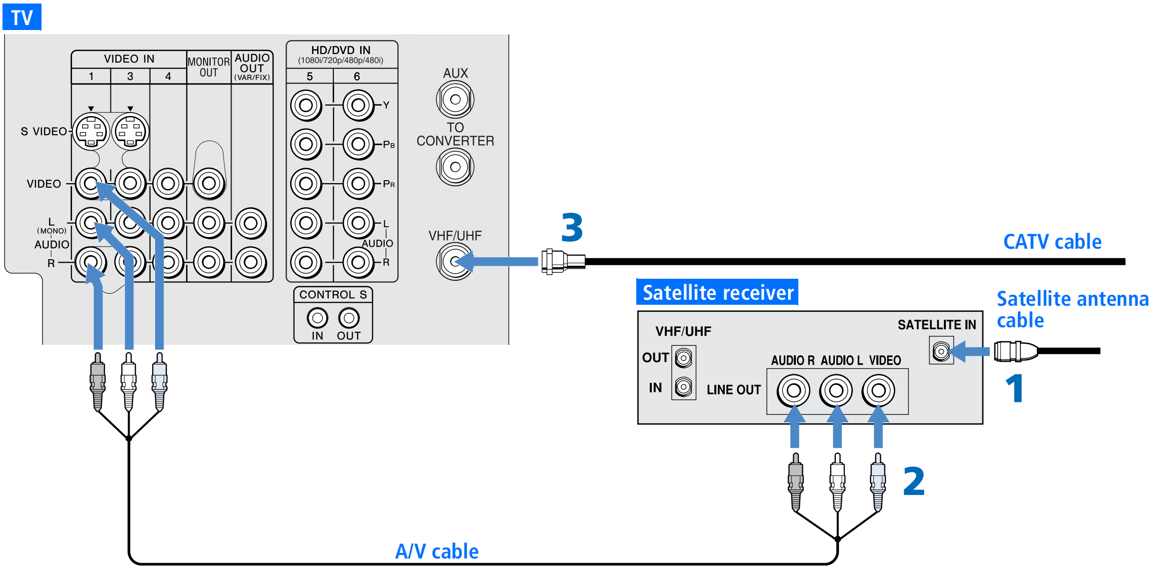
To Do This ...	*Do This ...*
View (monitor) what is being recorded	Press TV/VIDEO repeatedly to select the VCR input (VIDEO 1 in the illustration above).
Set up the TV remote control to operate the VCR(s)	If you have a non-Sony VCR, you must program the remote control. See "Programming the Remote Control" on pages 51-52.
Activate the TV remote control to operate the VCR(s)	Open the outside cover, as shown on page 50. Then set the A/V slide switch to the position you programmed for the VCR.
Control VCR functions with the TV remote control	See "Operating a VCR" on page 53.
Label video inputs to easily identify equipment connected to the TV	See the instructions for setting up Video Labels on pages 83-84.

Satellite Receiver

Using S VIDEO jacks? See page 25.

To connect a satellite receiver

1. Connect the satellite antenna cable to the satellite receiver's satellite input jack.
2. Use an A/V cable to connect the satellite receiver's A/V output jacks to the TV's A/V input jacks.
3. Connect a CATV cable from your cable or antenna to the TV's VHF/UHF jack.
4. Run the Auto Setup program, as described in "Setting Up the Channel List" on page 43.


TV
VIDEO IN
1
3
4
MONITOR OUT
AUDIO OUT (VAR/FIX)
HD/DVD IN (1080i/720p/480p/480i)
5
6
S VIDEO
VIDEO
L (MONO)
AUDIO
R
Y
PB
PR
L
AUDIO
R
AUX
TO CONVERTER
VHF/UHF
CONTROL S
IN
OUT
3
CATV cable
Satellite receiver
Satellite antenna cable
VHF/UHF
SATELLITE IN
OUT
IN
LINE OUT
AUDIO R
AUDIO L
VIDEO
1
2
A/V cable

Cables are often color-coded to connectors. Connect red to red, white to white, etc.

Notes on Using This Connection

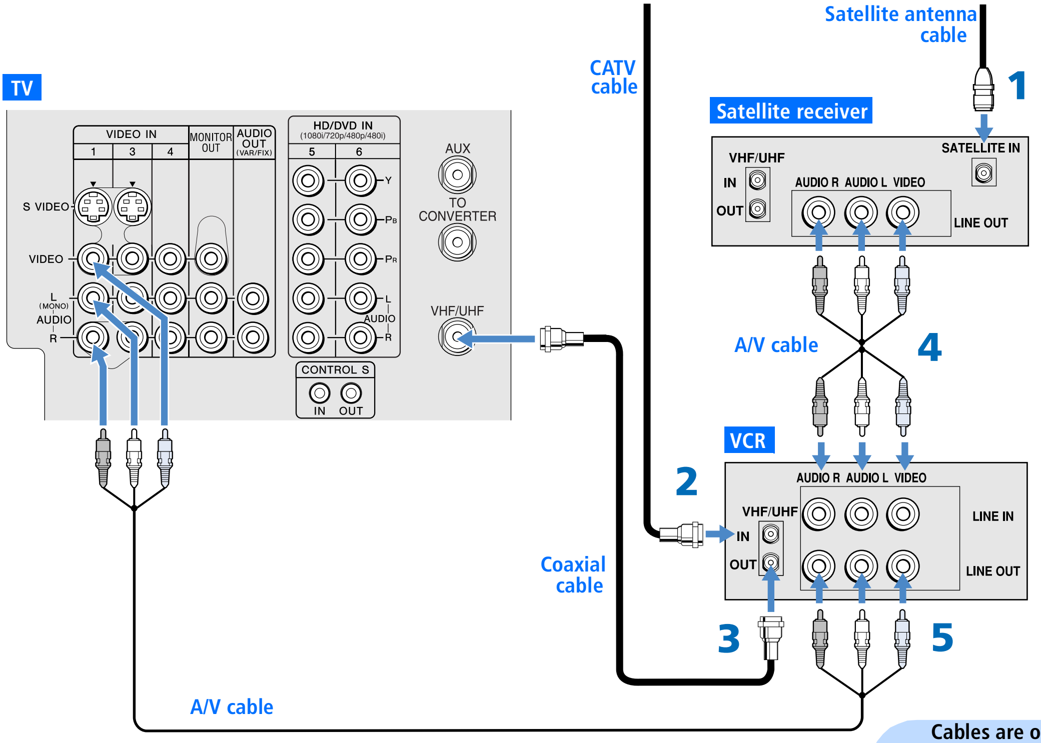
To Do This ...	*Do This ...*
Watch the satellite receiver	Press TV/VIDEO repeatedly to select the satellite receiver input (VIDEO 1 in the illustration).
Set up the TV remote control to operate the satellite receiver	If you have a non-Sony satellite receiver, you must program the remote control. See "Programming the Remote Control" on pages 51-52.
Activate the TV remote control to operate the satellite receiver	Press SAT/CABLE FUNCTION.
Control satellite receiver functions with the TV remote control	See "Operating a Satellite Receiver" on page 53.
Label video inputs to easily identify equipment connected to the TV	See the instructions for setting up Video Labels on pages 83-84.

Satellite Receiver and VCR

Using
S VIDEO jacks?
See page 25.

To connect a satellite receiver and VCR

1. Connect the satellite antenna cable to the satellite receiver's satellite input jack.
2. Connect the CATV cable to the VCR's VHF/UHF input jack.
3. Use a coaxial cable to connect the VCR's VHF/UHF output jack to the TV's VHF/UHF jack.
4. Use an A/V cable to connect the satellite receiver's A/V output jacks to the VCR's A/V input jacks.
5. Use an A/V cable to connect the VCR's A/V output jacks to the TV's A/V input jacks.
6. Run the Auto Setup program, as described in "Setting Up the Channel List" on page 43.



Satellite antenna cable
1
CATV cable
TV
Satellite receiver
VIDEO IN
1
3
4
MONITOR OUT
AUDIO OUT (VAR/FIX)
HD/DVD IN (1080i/720p/480p/480i)
5
6
AUX
TO CONVERTER
S VIDEO
VIDEO
L (MONO)
AUDIO
R
Y
PB
PR
L
AUDIO
R
VHF/UHF
CONTROL S
IN
OUT
VHF/UHF
IN
OUT
SATELLITE IN
AUDIO R
AUDIO L
VIDEO
LINE OUT
A/V cable
4
VCR
2
AUDIO R
AUDIO L
VIDEO
VHF/UHF
IN
OUT
LINE IN
LINE OUT
Coaxial cable
3
5
A/V cable

Cables are often color-coded to connectors. Connect red to red, white to white, etc.

Notes on Using This Connection

To Do This ...	*Do This ...*
Watch the satellite receiver	Press TV/VIDEO repeatedly to select the VCR input (VIDEO 1 in the illustration). The VCR may need to be turned on and set to the satellite receiver input.
Watch the VCR	Press TV/VIDEO repeatedly to select the input to which the VCR is connected (VIDEO 1 in the illustration).
Set up the TV remote control to operate the satellite receiver or VCR	If you have a non-Sony VCR or satellite receiver, you must program the remote control. See "Programming the Remote Control" on pages 51-52.
Activate the TV remote control to operate the satellite receiver or VCR	For the satellite receiver, press SAT/CABLE FUNCTION. For the VCR, open the outside cover, as shown on page 50. Then set the A/V slide switch to the position you programmed for the VCR.
Control satellite receiver and VCR functions with the TV remote control	See "Operating a Satellite Receiver" on page 53 and "Operating a VCR" on page 53.
Label video inputs to easily identify equipment connected to the TV	See the instructions for setting up Video Labels on pages 83-84.

DVD Player with Component Video Connectors

For best results, use this connection if your DVD player has component video (Y, PB, PR) jacks.

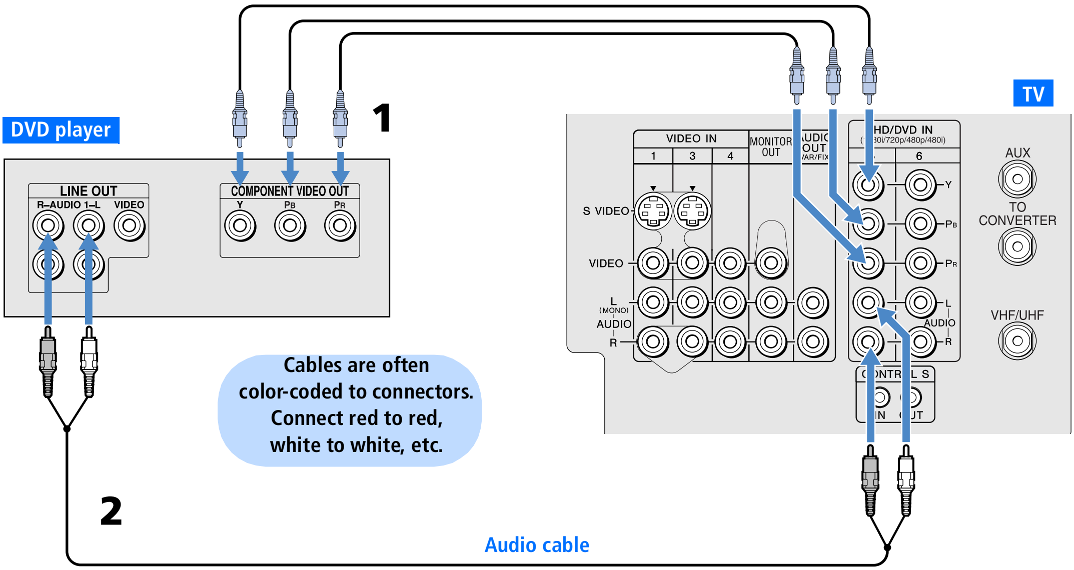
To connect a DVD player with component video connectors

1. Use a component video cable, or three composite video cables, to connect the DVD player's Y, PB and PR jacks to the Y, PB and PR jacks (VIDEO 5) on the TV.

   ✍ **The Y, PB and PR jacks on your DVD player are sometimes labeled Y, CB and CR, or Y, B-Y and R-Y. If so, connect the cables to like colors.**

2. Use an audio cable to connect the DVD player's audio output jacks to the TV's VIDEO 5 audio input jacks.

Component video cables


DVD player
LINE OUT
R–AUDIO 1–L
VIDEO
COMPONENT VIDEO OUT
Y
PB
PR
1
2
TV
VIDEO IN
1
3
4
MONITOR OUT
AUDIO OUT
HD/DVD IN
6
S VIDEO
VIDEO
L
(MONO)
AUDIO
R
Y
PB
PR
L
AUDIO
R
CONTROL S
IN
OUT
AUX
TO CONVERTER
VHF/UHF

Cables are often color-coded to connectors. Connect red to red, white to white, etc.

Audio cable

Notes on Using This Connection

To Do This ...	*Do This ...*
Watch the DVD player	Press TV/VIDEO repeatedly to select the DVD input (VIDEO 5 in the illustration).
Set up the TV remote control to operate the DVD player	If you have a non-Sony DVD player, you must program the remote control. See "Programming the Remote Control" on pages 51-52.
Activate the TV remote control to operate the DVD player	Open the outside cover, as shown on page 50. Then set the A/V slide switch to the position you programmed for the DVD player.
Control DVD functions with the TV remote control	See "Operating a DVD Player" on page 54.
Label video inputs to easily identify equipment connected to the TV	See the instructions for setting up Video Labels on pages 83-84.

You cannot record the signal from any equipment connected into the Y, PB, PR jacks.

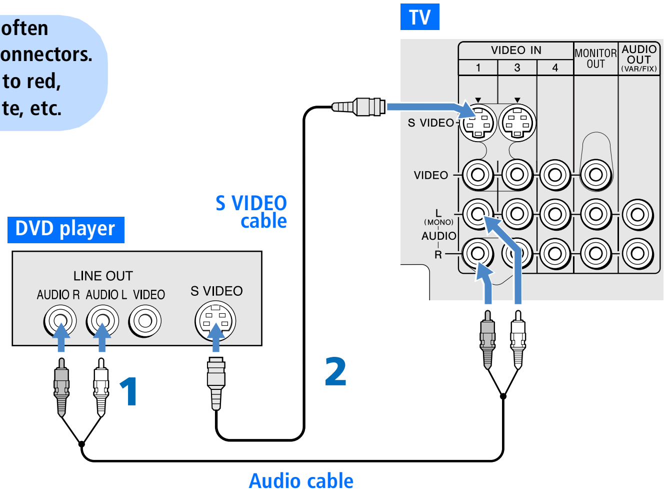
DVD Player with S VIDEO and Audio Connectors

Use this connection if your DVD player does not have component video (Y, PB, PR) jacks.

To connect a DVD player with A/V connectors

1. Use an audio cable to connect the DVD player's audio output jacks to the TV's audio input jacks.
2. Use an S VIDEO cable to connect the DVD player's S VIDEO jack to the TV's S VIDEO jack.

Cables are often color-coded to connectors. Connect red to red, white to white, etc.


TV
VIDEO IN
1
3
4
MONITOR OUT
AUDIO OUT (VAR/FIX)
S VIDEO
VIDEO
L (MONO)
AUDIO
R
S VIDEO cable
DVD player
LINE OUT
AUDIO R
AUDIO L
VIDEO
S VIDEO
1
2
Audio cable

Notes on Using This Connection

To Do This ...	*Do This ...*
Watch the DVD player	Press TV/VIDEO repeatedly to select the DVD input (VIDEO 1 in the illustration).
Set up the TV remote control to operate the DVD player	If you have a non-Sony DVD player, you must program the remote control. See "Programming the Remote Control" on pages 51-52.
Activate the TV remote control to operate the DVD player	Open the outside cover, as shown on page 50. Then set the A/V slide switch to the position you programmed for the DVD player.
Control DVD functions with the TV remote control	See "Operating a DVD Player" on page 54.
Label video inputs to easily identify equipment connected to the TV	See the instructions for setting up Video Labels on pages 83-84.

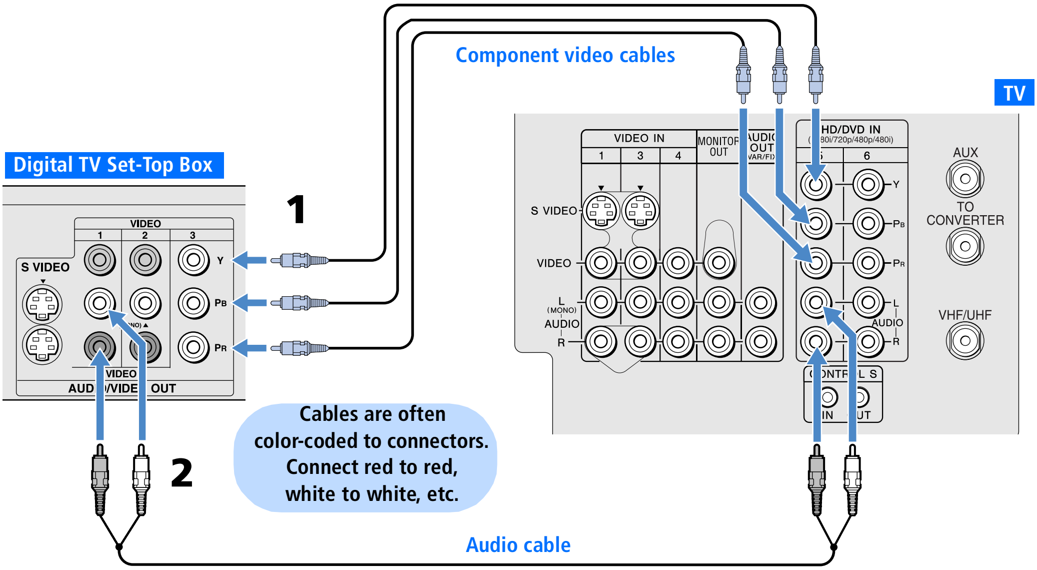
Digital TV Set-Top Box with Component Video Connectors

To connect a digital TV set-top box with component video connectors

1 Use three separate component video cables to connect the DVD player's Y, PB and PR jacks to the Y, PB and PR jacks (VIDEO 5) on the TV.

✍ **The Y, PB and PR jacks on your DVD player are sometimes labeled Y, CB and CR, or Y, B-Y and R-Y. If so, connect the cables to like colors.**

2 Use an audio cable to connect the set-top box's audio output jacks to the TV's VIDEO 5 audio input jacks.


Component video cables
TV
Digital TV Set-Top Box
1
2
VIDEO
S VIDEO
Y
PB
PR
AUDIO/VIDEO OUT
VIDEO IN
MONITOR OUT
AUDIO OUT (VAR/FIX)
HD/DVD IN (1080i/720p/480p/480i)
5
6
VIDEO
L (MONO) AUDIO R
AUX
TO CONVERTER
VHF/UHF
CONTROL S
IN
OUT

Cables are often color-coded to connectors. Connect red to red, white to white, etc.

Audio cable

Notes on Using This Connection

To Do This ...	*Do This ...*
Watch the digital TV set-top box	Press TV/VIDEO repeatedly to select the digital TV set-top box input (VIDEO 5 in the illustration).
Label video inputs to easily identify equipment connected to the TV	See the instructions for setting up Video Labels on pages 83-84.

✍ **You cannot record the signal from any equipment connected into the Y, PB, PR jacks.**

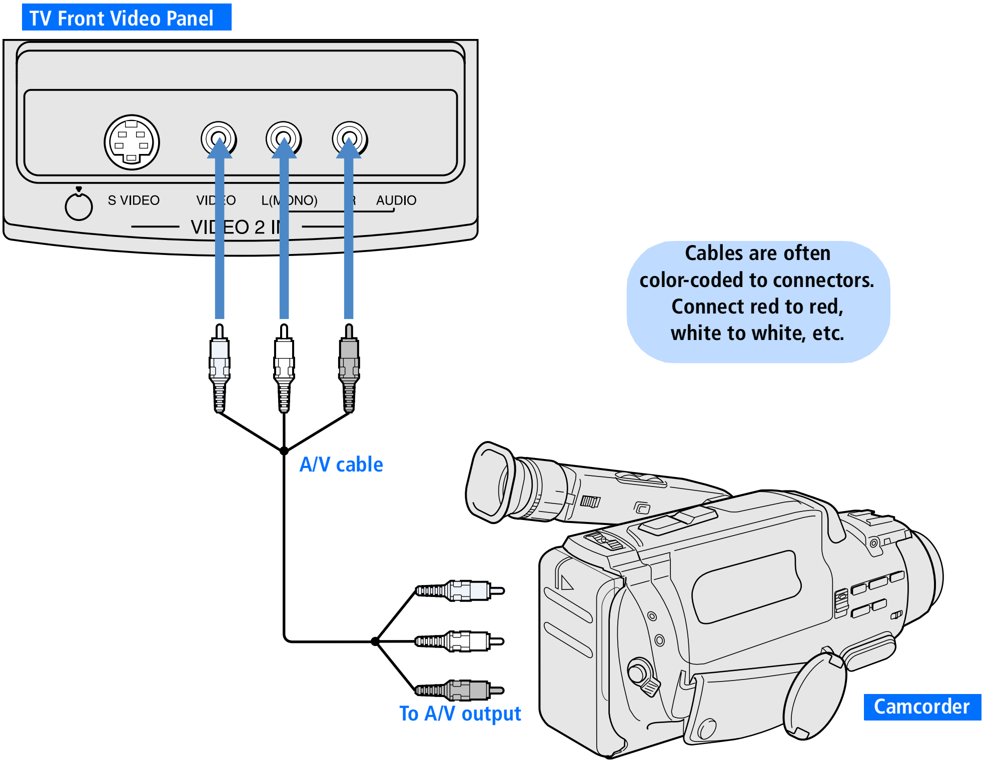
Camcorder

Using S VIDEO jacks? See page 25.

For easy connection of a camcorder, the TV has front A/V input jacks. If you prefer, however, you can connect the camcorder to the TV's rear A/V input jacks.

To connect a camcorder

1. Open the front video panel, as shown on page 13.
2. Use A/V cables to connect the camcorder's A/V output jacks to the TV's A/V input jacks.



Cables are often color-coded to connectors. Connect red to red, white to white, etc.

If you have a mono camcorder, connect its audio output jack to the TV's L MONO audio jack.

Notes on Using This Connection

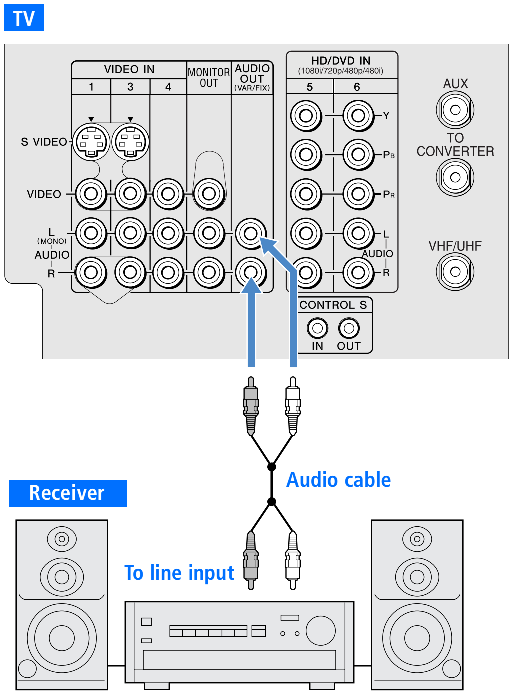
To Do This ...	*Do This ...*
Watch the camcorder	Press TV/VIDEO repeatedly to select the camcorder input (VIDEO 2 in the illustration).
Label video inputs to easily identify equipment connected to the TV	See the instructions for setting up Video Labels on pages 83-84.

Audio Receiver

For improved sound quality, you may want to play the TV's audio through your stereo system.

To connect an audio system

1 Use an audio cable to connect the TV's audio output jacks to the audio receiver's line input jacks.


TV
VIDEO IN
1
3
4
MONITOR OUT
AUDIO OUT (VAR/FIX)
HD/DVD IN (1080i/720p/480p/480i)
5
6
S VIDEO
VIDEO
L (MONO) AUDIO R
Y
PB
PR
L AUDIO R
AUX
TO CONVERTER
VHF/UHF
CONTROL S
IN
OUT
Audio cable
Receiver
To line input

Cables are often color-coded to connectors. Connect red to red, white to white.

2 Using the TV's Audio Menu, set the Speaker option to Off. Then set the Audio Out option to Fixed or Variable, depending on how you want to control the volume. For details, see "Using the Audio Menu" on page 74.

3 Turn on the audio receiver, and then set the receiver's line input to the jack into which you connected the TV.

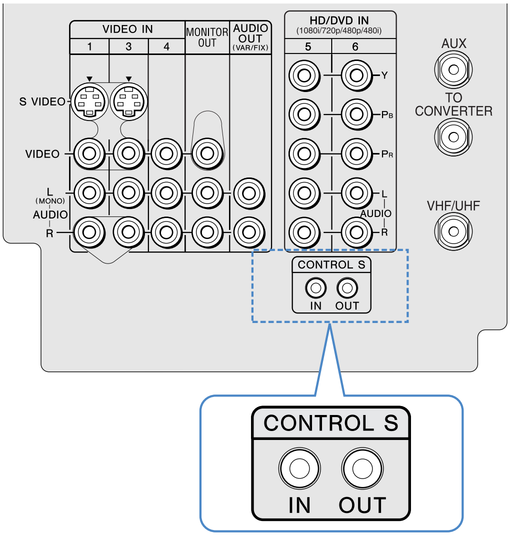
Using the CONTROL S Feature

CONTROL S allows you to control your system and other Sony equipment with one remote control. In addition to allowing you to control multiple devices with one remote control, the CONTROL S feature allows you to always point your remote control at your TV, instead of having to point it at the other equipment, which might be hidden or out of direct line of sight.

Use CONTROL S IN to send signals to the TV.

Use CONTROL S OUT to send signals to connected equipment.

TV



VIDEO IN
1
3
4
MONITOR OUT
AUDIO OUT (VAR/FIX)
HD/DVD IN (1080i/720p/480p/480i)
5
6
S VIDEO
VIDEO
L (MONO)
AUDIO
R
Y
PB
PR
L
AUDIO
R
AUX
TO CONVERTER
VHF/UHF
CONTROL S
IN
OUT
CONTROL S
IN
OUT

Setting Up the Channel List

After you finish connecting your TV, you need to run Auto Setup to set up your channels. The Auto Setup screen appears when you turn on your TV for the first time after hooking it up. If you do not want to set up the channels at this time, you can do it later by selecting the Auto Program option in the Channel Menu (see page 78).

✍ **The Auto Setup feature does not apply for installations that use a cable box for all channel selection.**

Using Auto Setup

1. Press POWER to turn on the TV.
2. Press TV FUNCTION on the remote control.
3. To continue running Auto Setup, press CH+. To exit Auto Setup, press CH-.

Auto Setup automatically creates a list of receivable channels. When finished, the lowest numbered channel is displayed.

To reset the TV to factory settings

1. Press POWER to turn on the TV.
2. Hold down RESET on the remote control.
3. Press TV POWER on the TV. (The TV will turn itself off, then back on.)
4. Release RESET.

Adjusting the Convergence Automatically (Flash Focus)

You can also access Flash Focus in the Setup menu. For details, see page 85.

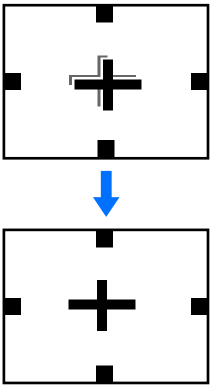
The projection tube image appears on the screen in three colors (red, green and blue). If they do not converge, the color is poor and the picture blurs. Before you use your TV, be sure to adjust the convergence. The Flash Focus feature allows you to adjust the convergence automatically.

It is recommended that you perform Flash Focus about 30 minutes after the TV is first turned on.

1 Tune to a TV or cable TV program.

2 Press the FLASH FOCUS button on the front panel of the TV (see pages 14-15).

The cross pattern appears and Flash Focus begins to work.



The adjustment is completed when the TV picture returns.

To Obtain Optimum Convergence

Whenever you find that the picture blurs, press FLASH FOCUS.

You cannot perform any other functions until Flash Focus has completed its cycle. If you perform any other operation while Flash Focus is in progress, the Flash Focus operation is canceled.

To Perform Additional Fine Manual Adjustments

- Use the Convergence feature, described on page 45.

Adjusting the Convergence Manually

The Convergence feature gives you more control over the picture's convergence than the Flash Focus feature, allowing you to fine-tune the convergence.

✍ **Before using the manual Convergence, you must first perform Flash Focus (as described on page 44).**

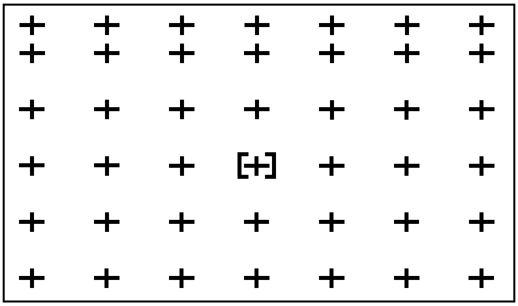
For details on using the Setup Menu, see page 83.

1 Press MENU to display the Menu.

2 Move the joystick ← or → to highlight the Setup icon and press ⊕.

3 Move the joystick to highlight Convergence and press ⊕.

A pattern of white crosses appears, with a yellow [ ] around one of the crosses. Aligned crosses (which do not need adjustment) look white and have little or no red or blue showing. Crosses that are not aligned show red or blue shades beyond their edges.



You can scroll up and down through the 9 x 7 field of crosses to manually converge all portions of the screen.

4 Using the joystick, move the [ ] to surround a cross that you want to adjust. Press ⊕. The [ ] changes to red.

5 If the cross that you selected has red edges, move the joystick until the red image is replaced with a white cross. Once you have finished this (or the cross does not have red edges), press ⊕. The [ ] changes to blue.

6 If the cross you selected has blue edges, move the joystick until the blue image is replaced with a white cross. Once you have finished this, press ⊕. The [ ] changes to yellow again.

7 Repeat steps 4 to 6 to adjust other crosses. When finished, press MENU to exit the Setup Menu.

Notes on Adjusting the Convergence Manually

- ❑ For best results, stand about 3 to 5 feet back from the picture when adjusting the convergence. Begin with the crosses in the center area of the screen and, once those are adjusted, move to the crosses on the edges of the screen.
- ❑ You can make separate adjustments to each wide mode: Full/Normal, Zoom, Wide Zoom, and Memory Stick/1080i high-definition input. (These features share a common convergence mode.) The cross pattern looks different in each of these, but the adjustment procedure is the same. Press the WIDE MODE button on the remote to toggle through the wide mode screens.
- ❑ To optimize the conditions for convergence adjustment, in the Video Menu, set Mode to Pro or Movie and lower the Picture level settings (see page 72). You can reset the adjustments by pressing the RESET button on the remote control.

Using the Remote Control

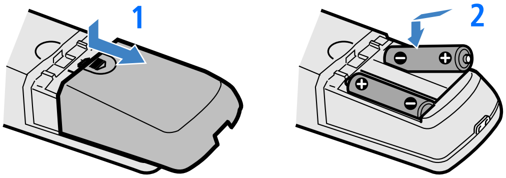
Overview

This chapter describes how to set up, program, and use the TV’s remote control.

Topic	Page
Inserting Batteries	47
Button Descriptions	
Outside Panel	48
Inside Panel	50
Programming the Remote Control	51

Inserting Batteries

1. Remove the battery cover from the remote control.
2. Insert two size AA (R6) batteries (supplied) by matching the ⊕ and ⊖ terminals on the batteries to the diagram inside the battery compartment.
3. Replace the battery cover.



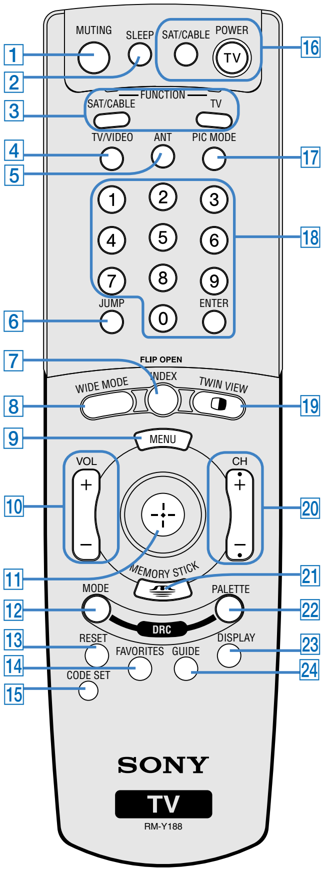
Remove the batteries to avoid damage from possible battery leakage whenever you anticipate that the remote control will not be used for an extended period.

Handle the remote control with care.

Avoid dropping it, getting it wet, placing it in direct sunlight, near a heater, or where the humidity is high.

Button Descriptions

Outside Panel



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MUTING
SLEEP
SAT/CABLE
POWER
TV
FUNCTION
SAT/CABLE
TV
TV/VIDEO
ANT
PIC MODE
1
2
3
4
5
6
7
8
9
JUMP
0
ENTER
FLIP OPEN
WIDE MODE
INDEX
TWIN VIEW
MENU
VOL
CH
MEMORY STICK
MODE
PALETTE
DRC
RESET
DISPLAY
FAVORITES
GUIDE
CODE SET
SONY
TV
RM-Y188

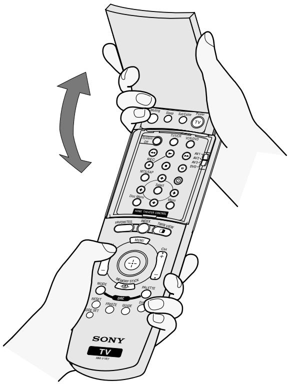
Button	Description
1 MUTING	Press to mute the sound. Press again or press VOL+ to restore the sound.
2 SLEEP	Press repeatedly until the TV displays the time in minutes (15, 30, 45, 60, or 90) that you want the TV to remain on before shutting off automatically. To cancel press until Sleep Off appears. While the Sleep feature is set, press once to display the remaining time.
3 FUNCTION Buttons	The indicator lights up momentarily when pressed to show which equipment the remote control is operating:
	SAT/CABLE: Press to have the remote control operate the satellite receiver or cable box.
	TV: Press to have the remote control operate the TV.
4 TV/VIDEO	Press repeatedly to cycle through the video equipment connected to the TV's video inputs.
5 ANT	Press to switch between the sources connected to the TV's VHF/UHF and AUX inputs.
6 JUMP	Press to jump back and forth between two channels. The TV alternates between the current channel and the last channel that was selected.
7 INDEX	Press to display the Scrolling Index. For details, see page 57.
8 WIDE MODE	Press repeatedly to step through the Wide Mode settings: Wide Zoom, Normal, Full, Zoom. Also available in the Screen menu. For details, see pages 58 and 76.
9 MENU	Press to display the Menu. Press again to exit from the Menu. For details, see page 71.
10 VOL +/-	Press to adjust the volume.
11 ⊕	Move the joystick ↑↓ ← → to move the on-screen cursor. To select an item, press the center of the joystick (⊕).
12 DRC MODE	Press repeatedly to cycle through the available high-resolution picture modes: Interlaced, Progressive, CineMotion. Also available in the Video Menu. For details, see "Selecting Video Options" on pages 72-73.
13 RESET	Press to reset the settings to the factory defaults. See pages 72 and 74. Also used to clear Favorite Channels (see page 62).
14 FAVORITES	Press to display the Favorite Channels list. For details, see page 62.

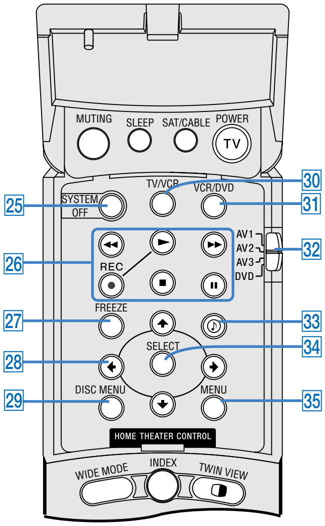
Button	Description
15 CODE SET	Press to program the remote control to operate non-Sony video equipment. For details, see “Programming the Remote Control” on page 51.
16 POWER Buttons	SAT/CABLE*: Press to turn on and off the satellite receiver or cable box.
	TV: Press to turn on and off the TV.
17 PIC MODE	Press repeatedly to cycle through the available video picture modes: Vivid, Standard, Movie, Pro. Also available in the Video Menu. For details, see “Selecting Video Options” on pages 72-73.
18 0 - 9 ENTER	Press 0 - 9 to select a channel; the channel changes after 3 seconds. Press ENTER to change channels immediately.
19 TWIN VIEW ◑	Press to turn on and off Twin View. For details, see pages 59-61.
20 CH +/-	Press to scan through channels. To scan quickly through channels, press and hold down either CH button.
21 MEMORY STICK	Press to display the Memory Stick Menu. For details, see “Using the Memory Stick Picture Viewer” on page 64.
22 DRC PALETTE	Press repeatedly to cycle through the three Custom DRC Palette options. Also available in the Video Menu. For details, see “Selecting Video Options” on pages 72-73.
23 DISPLAY	Press once to display the current channel number, current time, and channel label (if set). Press again to turn Display off.
24 GUIDE*	Press to display the program guide of your satellite program provider.

* Requires that you first program the remote control (page 51), if not Sony brand.

Inside Panel

To access the inside panel, open the outside cover as shown.




MUTING
SLEEP
SAT/CABLE
POWER
TV
SYSTEM OFF
TV/VCR
VCR/DVD
REC
AV1
AV2
AV3
DVD
FREEZE
SELECT
DISC MENU
MENU
HOME THEATER CONTROL
WIDE MODE
INDEX
TWIN VIEW
25
26
27
28
29
30
31
32
33
34
35

Opening the outside cover automatically switches the remote control to operate your VCR or DVD player, depending on the position of the A/V slide switch. For details, see page 51.

VCR and DVD buttons require that you first program the remote (page 51), if the VCR and DVD player are not Sony brand.

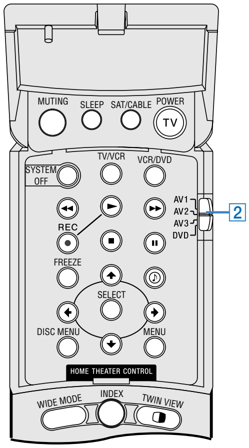
Button	*Description*
25 SYSTEM OFF	Press to turn off all Sony brand audio/video equipment at once. (May not function with older Sony equipment.)
26 Transport Buttons	◀◀ Rewind
	▶ Play
	● Record (press together with ▶)
	■ Stop
	▶▶ Fast forward
	❚❚ Pause
27 FREEZE	Press to freeze the picture. Press again to restore the picture. For details, see "Using the Freeze Function" on page 63.
28 ⬆⬇ ⬅ ➡	Press ⬆⬇ ⬅ ➡ to move the VCR or DVD player's on-screen cursor.
29 DISC MENU	Press to display the DVD Menu.
30 TV/VCR	Press to change to the VHF/UHF output of the VCR.
31 VCR/DVD	Press to turn on and off the VCR or DVD player.
32 AV1/2/3/DVD Slide Switch	Use the A/V slide switch to control connected video equipment. You can program one video source for each switch position. For details, see "Programming the Remote Control" on page 51.
33 ♪	Press repeatedly to step through the Audio Effect options. Also available in the Audio Menu. For details, see page 74.
34 SELECT	Press to select an item in the VCR or DVD player's menu.
35 MENU	Press to display the DVD player setup menu.

Programming the Remote Control

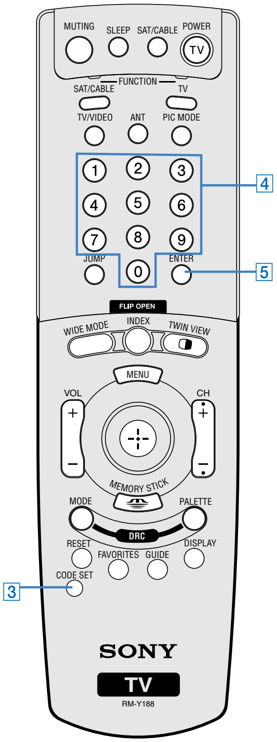
The remote control is preset to operate Sony brand video equipment.

Sony Equipment	***Switch Position on Remote Control***	***Programmable Code Number***
Beta, Ed Beta VCRs	AV1	303
8 mm VCR	AV2	302
VHS VCR	AV3	301
DVD player	DVD	751

If you have video equipment other than Sony brand that you want to control with the TV's remote control, use the following procedure to program the remote control.


MUTING
SLEEP
SAT/CABLE
POWER
TV
SYSTEM OFF
TV/VCR
VCR/DVD
AV1
AV2
AV3
DVD
2
REC
FREEZE
SELECT
DISC MENU
MENU
HOME THEATER CONTROL
WIDE MODE
INDEX
TWIN VIEW

The equipment must have infrared (IR) remote capability in order to be used with the remote control.


MUTING
SLEEP
SAT/CABLE
POWER
TV
SAT/CABLE
FUNCTION
TV
TV/VIDEO
ANT
PIC MODE
1
2
3
4
5
6
7
8
9
0
4
JUMP
ENTER
5
FLIP OPEN
WIDE MODE
INDEX
TWIN VIEW
MENU
VOL
CH
MEMORY STICK
MODE
PALETTE
DRC
RESET
FAVORITES
GUIDE
DISPLAY
CODE SET
3
SONY
TV
RM-Y188

1. Turn to the list of "Manufacturer's Codes" on page 52, and find the three-digit code number for the manufacturer of your equipment. (If more than one code number is listed, use the number listed first.)
2. Open the remote control and set the A/V slide switch to 1, 2, 3, or DVD.
3. Press CODE SET.
4. Enter the three-digit manufacturer's code number.
5. Press ENTER.

You must do step 5 within 10 seconds of step 4, or you must redo steps 3 through 5.

6. To check if the code number works, aim the TV's remote control at the equipment and press the POWER button that corresponds with that equipment. If it responds, you are done. If not, try using another code listed for that manufacturer.

Notes

- If more than one code number is listed, try entering them one by one until you come to the correct code for your equipment.
- If you enter a new code number, the code number you previously entered at that setting is erased.
- In some cases, you may not be able to operate your equipment with the supplied remote control. In such cases, use the equipment's own remote control unit.
- Whenever you remove the batteries to replace them, the code numbers may revert to the factory setting and must be reset.

Manufacturer's Codes

VCRs

Manufacturer	Code
Sony	301, 302, 303
Admiral (M. Ward)	327
Aiwa	338, 344
Audio Dynamic	314, 337
Broksonic	319, 317
Canon	309, 308
Citizen	332
Craig	302, 332
Criterion	315
Curtis Mathes	304, 338, 309
Daewoo	341, 312, 309
DBX	314, 336, 337
Dimensia	304
Emerson	319, 320, 316, 317, 318, 341
Fisher	330, 335
Funai	338
General Electric	329, 304, 309
Go Video	322, 339, 340
Goldstar	332
Hitachi	306, 304, 305, 338
Instant Replay	309, 308
JC Penney	309, 305, 304, 330, 314, 336, 337
JVC	314, 336, 337, 345, 346, 347
Kenwood	314, 336, 332, 337
LXI (Sears)	332, 305, 330, 335, 338
Magnavox	308, 309, 310
Marantz	314, 336, 337
Marta	332
Memorex	309, 335
Minolta	305, 304
Mitsubishi/ MGA	323, 324, 325, 326
Multitech	325, 338, 321
NEC	314, 336, 337
Olympic	309, 308
Optimus	327
Orion	317
Panasonic	308, 309, 306, 307
Pentax	305, 304
Philco	308, 309
Philips	308, 309, 310
Pioneer	308
Quasar	308, 309, 306
RCA/ PROSCAN	304, 305, 308, 309, 311, 312, 313, 310, 329
Realistic	309, 330, 328, 335, 324, 338
Sansui	314
Samsung	322, 313, 321
Sanyo	330, 335
Scott	312, 313, 321, 335, 323, 324, 325, 326
Sharp	327, 328
Signature 2000 (M. Ward)	338, 327
SV2000	338
Sylvania	308, 309, 338, 310
Symphonic	338
Tashiro	332
Tatung	314, 336, 337
Teac	314, 336, 338, 337
Technics	309, 308
Toshiba	312, 311
Wards	327, 328, 335, 331, 332
Yamaha	314, 330, 336, 337
Zenith	331

Laserdisc Players

Manufacturer	Code
Sony	701
Panasonic	704, 710
Pioneer	702

DVD Players

Manufacturer	Code
Sony	751
General Electric	755
Hitachi	758
JVC	756
Magnavox	757
Mitsubishi	761
Oritron	759
Panasonic	753
Philips	757
Pioneer	752
RCA/Proscan	755
Samsung	758
Toshiba	754
Zenith	760

Cable Boxes

Manufacturer	Code
Sony	230
Hamlin/Regal	222, 223, 224, 225, 226
Jerrold/G. I.	201, 202, 203, 204, 205, 206, 207, 208, 218
Oak	227, 228, 229
Panasonic	219, 220, 221
Pioneer	214, 215
Scientific Atlanta	209, 210, 211
Tocom	216, 217
Zenith	212, 213

Satellite Receivers

Manufacturer	Code
Sony	801
Dish Network	810
Echostar	810
General Electric	802
Hitachi	805
Hughes	804
Mitsubishi	809
Panasonic	803
RCA/ PROSCAN	802, 808
Toshiba	806, 807

Using Other Equipment with Your TV Remote Control

All Equipment

To Do This ...	Do This ...
Switch the TV's input to the VCR, DVD player, or other connected equipment	Press TV/VIDEO repeatedly to cycle through the video equipment connected to the TV's video inputs.
Set up the TV remote control to operate non-Sony equipment	You must program the remote control the first time you use it. See "Programming the Remote Control" on pages 51 to 52.

Operating a VCR

To Do This ...	Press
Activate the remote control to operate the VCR	Open the outside cover, as shown on page 50. The set the A/V slide switch to the position you programmed for the VCR.
Change channels	CH +/-
Record	► and ● simultaneously
Play	►
Stop	■
Fast forward	►►
Rewind the tape	◄◄
Pause	❚❚
Search the picture forward or backward	►► or ◄◄ during playback (release to resume normal playback)
Change input mode	TV/VCR

Operating a Satellite Receiver

To Do This ...	Press
Activate the remote control to operate the satellite receiver	SAT/CABLE FUNCTION
Turn on/off	SAT/CABLE POWER
Select a channel	0-9, ENTER
Change channels	CH +/-
Back to previous channel	JUMP
Display channel number	DISPLAY
Display SAT Guide	GUIDE
Display SAT Menu	MENU
Move highlight (cursor)	Move the joystick ↑ ↓ ← →
Select item	⊕

Operating a Cable Box

To Do This ...	Press
Activate the remote control to operate the cable box	SAT/CABLE FUNCTION
Turn on/off	SAT/CABLE POWER
Select a channel	0-9, ENTER
Change channels	CH +/-
Back to previous channel	JUMP

Operating a DVD Player

To Do This ...	Press
Activate the remote control to operate the DVD	Open the outside cover, as shown on page 50. Then set the A/V slide switch to the position you programmed for the DVD player.
Play	►
Stop	■
Pause	❚❚
Step through different tracks of the disc	►► to step forward or ◄◄ to step backward
Step through different chapters of a video disc	CH+ to step forward or CH- to step backward
Display the DVD player Menu (Setup)	MENU (inside panel)
Display the DVD Menu	DISC MENU
Move highlight (cursor)	↑ ↓ ← →
Select item	SELECT

Operating an MDP (Laserdisc Player)

To Do This ...	Press
Activate the remote control to operate the MDP	Open the outside cover, as shown on page 50. Then set the A/V slide switch to the position you programmed for the MDP player.
Play	►
Stop	■
Pause	❚❚
Search the picture forward or backward	►► or ◄◄ during playback (release to resume normal playback)
Search a chapter forward or backward	CH +/-

Using the Features

Overview

This chapter describes how to use the features of your TV.

Topic	*Page*
Watching TV	56
Using the Scrolling Index	57
Using Wide Mode	58
Using Twin View	59
Using Favorite Channels	62
Using the Freeze Function	63
Using the Memory Stick Picture Viewer	64

Watching TV

💡 For a complete list of all the functions of the remote control, see pages 47-52.

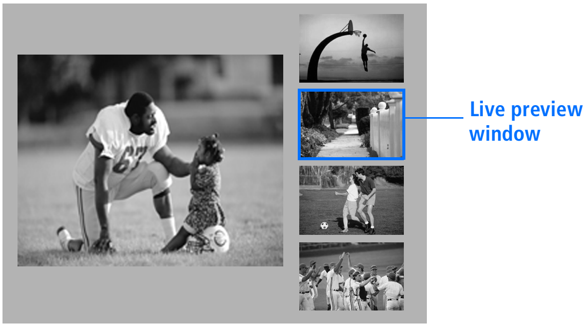
To Do This ...	Do This ...
Activate the remote control to operate the TV	Press TV FUNCTION
Turn on/off the TV	Press TV POWER
Tune directly to a channel	Press 0-9 and then ENTER (or wait 3 seconds) or Press CH+/-
Adjust the volume	Press VOL +/-
Mute the volume	Press MUTING (press again to unmute)
Alternate back and forth between two channels	Press JUMP The TV alternates between the current channel and the last channel tuned.
Display the current channel number (and other information)	Press DISPLAY once to display the channel number, current time, and channel label (if set). Press DISPLAY again to turn Display off.
Switch the TV's input to the VCR, DVD player, or other connected equipment	Press TV/VIDEO repeatedly to cycle through the video equipment connected to the TV's video inputs.
Change video and audio options, customize the TV's setup, set parental controls, and more	Press MENU to display the Menu. For details, see "Using the Menus" on page 71.
Switch the TV's input between sources connected to the TV's VHF/UHF and AUX inputs	Press ANT to alternate between sources connected to the TV's VHF/UHF and AUX inputs.

Using the Scrolling Index

The Scrolling Index lets you select programs from a scrolling index of video pictures.

1 Press INDEX.

The Scrolling Index appears, with the currently selected program in the main (left) window, and four scrolling video pictures in the right.



As each picture on the right scrolls to the live preview window, it changes briefly from a frozen video picture to a live video. The right side continues to scroll through the entire channel list.

2 To change the direction of the scrolling, move the joystick ↑ or ↓.

3 To change the speed of the scrolling, move and hold the joystick ↑ or ↓.

4 To change a frozen video picture to a live video, move the joystick ↑ or ↓ to highlight the picture, then press ⊕.

5 To move the live video (from step 4) from the right to the main (left) window of the Scrolling Index, press ⊕ again.

To exit the Scrolling Index

- Press INDEX.

Factors Affecting Scrolling Index

- Scrolling Index feature does not function if you use a cable box to view all channels.
- Sources connected to the AUX, VIDEO 5, VIDEO 6, and VIDEO 7 inputs display in the left window, but not the right windows.
- Scrolling Index does not function if parental controls are set (see page 80).

Using Wide Mode

Wide Screen mode lets you watch 4:3 normal broadcasts in several Wide Screen modes (16:9 aspect ratio).

When viewing high-definition programs broadcast in 720p/1080i, it is not possible to change between Wide Screen modes.

You can also access the Wide Mode settings in the Screen menu. For details, see page 76.

- Press WIDE MODE repeatedly to toggle through the following Wide Mode settings.

Wide Zoom

Wide Zoom enlarges the 4:3 picture, while the upper and lower parts of the picture are condensed to fit the 16:9 screen.

Normal

Normal returns the 4:3 picture to its original size.

Full

Full Mode stretches the 4:3 picture horizontally only, to fill the 16:9 screen.

Zoom

Zoom Mode enlarges the 4:3 picture horizontally and vertically to an equal aspect ratio that fills the 16:9 screen. Useful for watching Letterbox movies.

When you change channels or inputs, the Wide Mode settings revert to the 4:3 Default setting in the Screen menu. To retain the current Wide Mode setting as channels and inputs are changed, set 4:3 Default to Off. For details, see page 77.

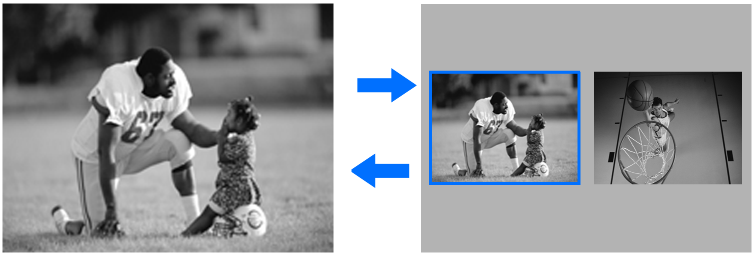
Using Twin View

Twin View lets you see two pictures from two sources — from an antenna, VCR, DVD, etc. — on the screen at the same time. You hear the sound from only one of the sources at a time, but you can choose which source's sound is selected. You can also change the relative size of each of the pictures.

Displaying Twin Pictures

1. Tune the TV to a working channel.
2. Press ◨.

   A second picture appears. The active picture is highlighted in blue.



To cancel Twin View and watch the active picture

- Press ◨ or ⊕.

Factors Affecting Twin View

- If you use a cable box to view all channels, the same channel appears in both windows because the cable box unscrambles only one channel at a time.
- If you use a cable box, you can view the cable box output in one window and view a different source (such as a VCR or DVD player) in the second window by using the TV/VIDEO button. For details, see "Connecting Optional Equipment" on page 25.
- Sources connected to the AUX, VIDEO 5, VIDEO 6, and VIDEO 7 inputs display in the left window, but not the right.
- If you are viewing a 4:3 source and a 16:9 enhanced source (such as a DVD) side by side, the 4:3 source appears larger.
- Twin View does not display channels that are blocked by parental settings (see page 80).

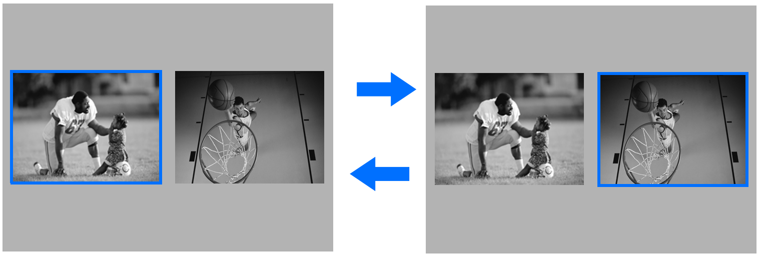
Activating the Picture

To activate the picture in the right window

- ☐ Move the joystick ➡.

To activate the picture in the left window

- ☐ Move the joystick ⬅.



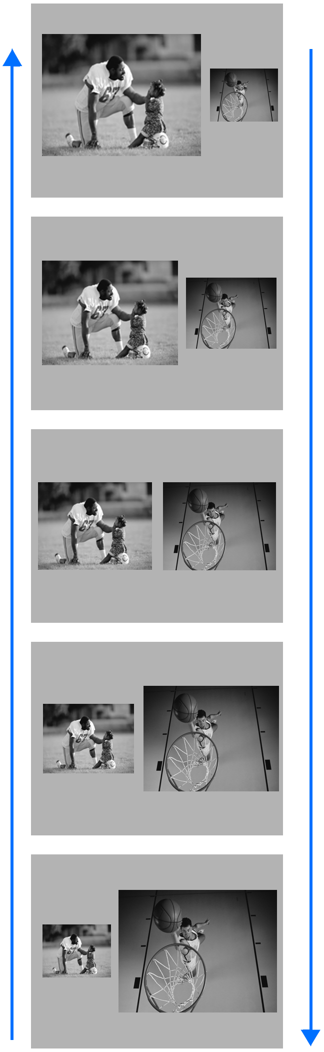
Functions Available in the Active (Highlighted) Window

To Do This ...	*Do This ...*
Tune to a channel	Press 0-9 and then ENTER (or wait 3 seconds) or Press CH+/-
Adjust the volume	Press VOL +/-
Mute the volume	Press MUTING (press again to unmute)
Switch the TV's input between sources connected to the TV's VHF/UHF and AUX inputs	Press ANT (left window only)
Switch the TV's input between sources connected to the TV's A/V inputs	Press TV/VIDEO
Change the picture size	Move the joystick ⬆ or ⬇. (For details, see "Changing the Picture Size" on page 61.)

Changing the Picture Size

The zoom feature lets you vary the relative size of the left and right pictures.

1. Move the joystick ← or → to activate the picture that you want to resize.
2. Move the joystick ↑ to enlarge the picture.
3. Move the joystick ↓ to make the picture smaller.



When you adjust the picture sizes, the TV memorizes the change. The next time you use the Twin View function, the memorized sizes appear.

Using Favorite Channels

The Favorite Channels feature lets you select programs from a list of up to eight favorite channels that you specify.

Creating a List of Favorite Channels

For details on using the Channel Menu, see page 78.

1 Press MENU to display the Menu.

2 Move the joystick ← or → to highlight the Channel icon and press ⊕.

3 Press ⊕ to select Favorite Channels.

4 Move the joystick ↑ or ↓ to highlight a Favorite Channel number (1-8) and press ⊕.

5 Move the joystick ↑ or ↓ to highlight a channel you want to assign to the Favorite Channel number. A preview of the highlighted channel appears in the upper right of the screen. Press ⊕ to select that channel as a Favorite Channel.

6 To add more channels to your favorites list, repeat steps 4-5.

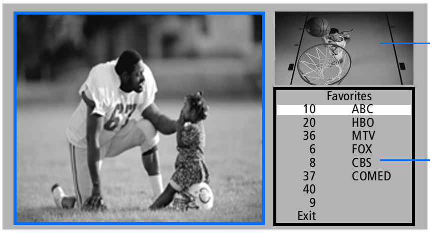
To clear a Favorite Channel, move the joystick ↑ or ↓ to highlight the channel you want to clear. Press ⊕ and then press RESET.

7 Press MENU to exit the Menu.

Displaying a List of Favorite Channels

To assign Channel Labels (e.g., ABC, HBO, MTV, etc.) to channel numbers, as shown at right, use the Channel Label feature in the Channel Menu (see page 79).

1 Press FAVORITES. The Favorite Channels list appears.



Favorites

10	ABC
20	HBO
36	MTV
6	FOX
8	CBS
37	COMED
40	
9	
Exit	

Preview of highlighted Favorite Channel

Favorite Channels

2 Move the joystick ↑ or ↓ to highlight the channel you want to watch.

A preview of the highlighted Favorite Channel appears.

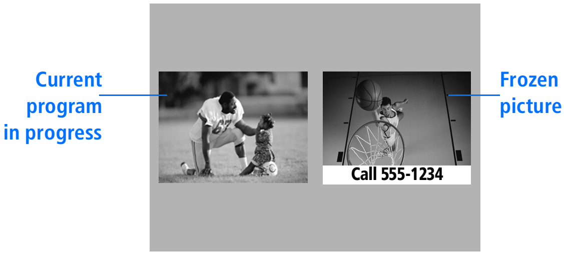
3 Press ⊕ to select the channel you want to watch.

Using the Freeze Function

The FREEZE button allows you to temporarily capture a program's picture. You can use this feature to write down information such as phone numbers, recipes, etc.

✍ **The Freeze feature is not available while you are using the Twin View or Scrolling Index features.**

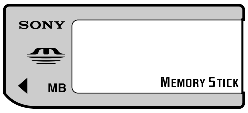
1. When the program information you want to capture is displayed, press FREEZE.
2. The TV switches to Twin View mode and displays the "frozen" picture on the right, while the current program continues on the left.



3. To cancel and return to normal viewing, press FREEZE (or just tune to another channel).

Using the Memory Stick Picture Viewer

About Memory Stick



Memory Stick (sold separately) is a new, compact, portable, and versatile Integrated Circuit recording medium with a data capacity that exceeds that of a floppy disk. Memory Stick is specially designed for exchanging and sharing digital data among Memory Stick compatible products such as digital cameras and digital video cameras. Because it is removable, Memory Stick can also be used for external data storage.

You cannot write to Memory Stick media using the TV.

Memory Stick technology allows you to view on your TV screen digital (jpeg) images that are stored on Memory Stick media. You can choose from an index of the images stored on the Memory Stick, or you can run a slideshow of those images. You can also customize the features of the slideshow by selecting the length of time that each image is displayed, toggling the display of file information, and rotating each image.

For more information about the using Memory Stick media, see “Notes on Using Memory Stick Media” on page 89.

Supported Image Types

This TV’s Memory Stick viewer can display only still images that have been recorded on Memory Stick media by Sony brand digital still and video cameras.

The TV’s Memory Stick viewer is compatible with Memory Sticks up to and including 128MB. It is not compatible with Memory Sticks that exceed 128MB.

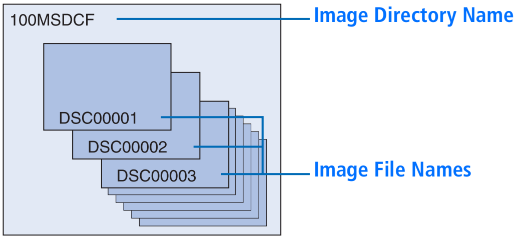
Recorded images must also meet the following specifications:

- ☐ Compression format: JPEG
- ☐ File name format: DCF compliant

JPEG stands for “Joint Photographic Experts Group,” which is the organization that implemented this format. DCF stands for “Design Rules for Camera File Systems,” which are specifications established by the Japan Electronic Industry Development Association (JEIDA).

About DCF File Names

Most Sony brand digital still and video cameras automatically record still images using DCF compliant directory and file names, as shown in the following example:



Do not rename directories. If the names are changed, the still images cannot be displayed on your TV.

Unsupported Image Types

This TV’s Memory Stick viewer cannot display any of the following:

- Images recorded on digital still cameras and digital video cameras that are not Sony brand
- Images recorded using products that are not DCF compliant, including the following Sony products:

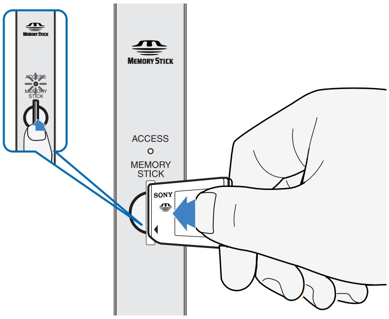
Digital still cameras	DSC-D700, DSC-D770
Digital video cameras	DCR-TRV900/DSR-PD100A

- Images stored on a Memory Stick that has a capacity that exceeds 128MB
- Images stored in TIFF or any other non-JPEG compression format
- Images in directories that were modified or renamed on a computer
- Images with less than 16 horizontal and/or vertical lines per dot
- Images with more than 4096 horizontal and/or vertical lines per dot
- Movie clips

Inserting and Removing a Memory Stick

To insert a Memory Stick

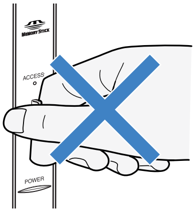
1 Locate the Memory Stick slot (see pages 14-15) and insert the Memory Stick into the Memory Stick slot as illustrated below. When inserted properly, it should slide in with little resistance and click into place.


MEMORY STICK
ACCESS
MEMORY STICK
SONY

Be sure to insert the Memory Stick in the correct direction. If the Memory Stick is forced in the wrong way, it may become damaged.

Insert only Memory Stick media into the Memory Stick slot. Attempting to insert other objects into the slot may damage the TV.

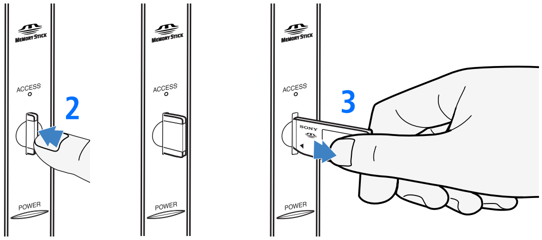
When removing the Memory Stick, do not attempt to just pull it from its slot. Follow steps 1-3 (right).


MEMORY STICK
ACCESS
POWER

To remove a Memory Stick

1 Check that the Memory Stick indicator is off. (When the light is on, this indicates that the TV is reading data from the Memory Stick.)

2 Push the Memory Stick gently into the slot, and then release it. The Memory Stick media is ejected.

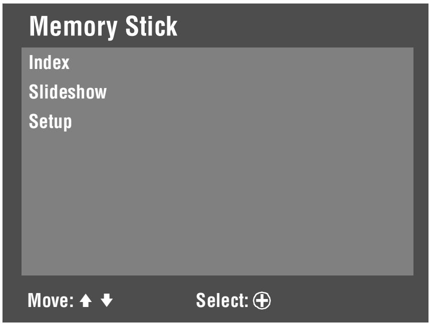

MEMORY STICK
ACCESS
POWER
2
MEMORY STICK
ACCESS
POWER
MEMORY STICK
ACCESS
POWER
3
SONY

3 Pull the Memory Stick completely out of the slot.

To protect small children from injury from Memory Stick Media, remove all Memory Stick media from the TV's Memory Stick slot and store it in a safe location when it is not in use.

Displaying the Memory Stick Menu

1. Insert a Memory Stick that contains the images you want to view. For details, see page 66.
2. Press the MEMORY STICK button on the remote control. The Memory Stick Menu appears.



3. To select an option, move the joystick ↑ or ↓ to highlight the option and press ⊕.

Option	*Description*
Index	Displays an index of thumbnail images that are on the Memory Stick. For details, see “Using the Memory Stick Index” on page 68.
Slideshow	Displays a slideshow of images that are on the Memory Stick. For details, see “Using the Memory Stick Slideshow” on page 69.
Setup	Allows you to change slideshow options and rotate images. For details, see “Changing the Memory Stick Setup Options” on page 69.

4. To exit the Memory Stick Menu, press CH +/-, TV/VIDEO, ANT, or use the 0-9 buttons and ENTER (or wait 3 seconds) to select a channel.

Memory Stick functions are not available while using Twin View, Freeze or Favorite Channel functions.

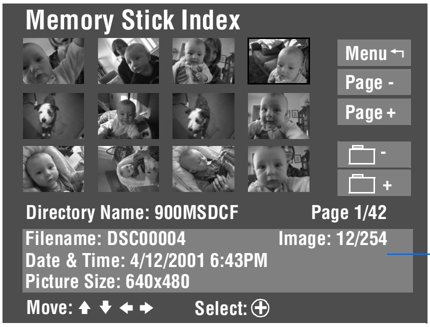
Using the Memory Stick Index

The Memory Stick Index lets you view images that are on the Memory Stick in an index of thumbnail images.

✍ **There is no audio signal available while viewing images on Memory Stick.**

1. Insert a Memory Stick that contains the images you want to view. For details, see page 66.
2. Press the MEMORY STICK button on the remote control. The Memory Stick Menu appears.
3. Move the joystick to highlight Index and press ⊕. The Memory Stick Index appears.

The Page and folder (🗀) buttons are available only if the Memory Stick contains more images or folders than can be displayed on one screen.



Directory Name: 900MSDCF Page 1/42

Filename: DSC00004 Image: 12/254

Date & Time: 4/12/2001 6:43PM

Picture Size: 640x480

The selected image is highlighted in yellow

Information about the selected image

4. Move the joystick ↑ ↓ ← → to highlight an image and press ⊕ to select the image. Selecting an image displays that image at full size. While an image is displayed full size, you can do any of the following:

To Do This ...	*Do This ...*
Display the previous image	Move the joystick ←.
Display the next image	Move the joystick →. If you move the joystick → while viewing the last image, the first image is displayed. If you move the joystick ← while viewing the first image, the last image is displayed.
Display the Memory Stick Index	Press ⊕.

Larger images will take longer to display on screen.

5. To return to the Memory Stick Menu, move the joystick to Menu↵ and press ⊕.

✍ **If a blank square appears instead of a thumbnail image, this indicates that the image does not support a thumbnail view. Selecting the icon, however, displays the full-size image on the screen. It could also indicate that both the thumbnail and full-size images are corrupted or not supported.**

Using the Memory Stick Slideshow

The Memory Stick Slideshow lets you watch a slideshow of the images that are on the Memory Stick.

1 Insert a Memory Stick that contains the images you want to view. For details, see page 66.

2 Press the MEMORY STICK button on the remote control. The Memory Stick Menu appears.

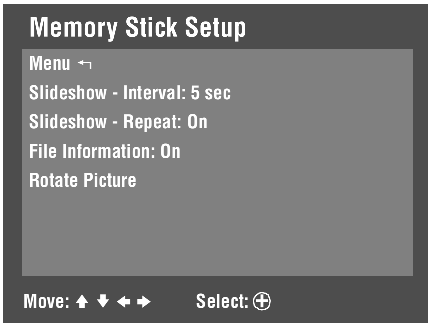
3 Move the joystick to highlight Slideshow and press ⊕. The slideshow starts.

4 To end the slideshow, press ⊕. The Memory Stick Menu is displayed.

Changing the Memory Stick Setup Options

1 Press the MEMORY STICK button on the remote control. The Memory Stick Menu appears.

2 Move the joystick to highlight Setup and press ⊕. The Memory Stick Setup Menu appears.



Memory Stick Setup

Menu ↵

Slideshow - Interval: 5 sec

Slideshow - Repeat: On

File Information: On

Rotate Picture

3 Move the joystick to highlight an option and press ⊕.

Option	*Description*
Menu	Returns to the Memory Stick Menu.
Slideshow – Interval	Decrease or increase the length of time that each image is displayed: 5 seconds, 10 seconds, 1 minute, 5 minutes, or 15 minutes.
Slideshow – Repeat	Select On to set the slideshow to repeat after displaying all the images recorded on the Memory Stick. Select Off to not repeat the slideshow.
File Information	Select On to show file information of each image while that image is being displayed.
Rotate Picture	Displays the Rotate Picture screen. For details, see “Using the Rotate Picture Screen” on page 70.

4 Move the joystick ➡ (or press ⊕) to change settings. Move the joystick ⬅ (or press ⊕) to select the changed setting.

5 To exit the Memory Stick Setup Menu, move the joystick to Menu↵ and press ⊕.

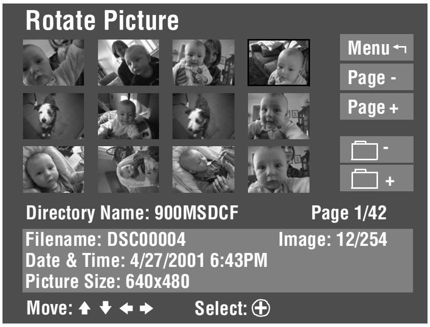
Using the Rotate Picture Screen

The Page and folder (🗀) buttons are available only if the Memory Stick contains more images or folders than can be displayed on one screen.

The Rotate Picture Screen lets you rotate an image from an index of thumbnails.

You cannot rotate images if the LOCK switch on the Memory Stick is on. To rotate the images, first set the LOCK switch to off.

1 In the Memory Stick Setup Menu, move the joystick to highlight Rotate Picture and press ⊕. The Rotate Picture screen appears.



Directory Name: 900MSDCF Page 1/42

Filename: DSC00004 Image: 12/254
Date & Time: 4/27/2001 6:43PM
Picture Size: 640x480

Move: ↑ ↓ ← → Select: ⊕

2 Move the joystick ↑ ↓ ← → to highlight an image that you want to rotate.

3 Press ⊕ to rotate an image 90 degrees in a clockwise direction.

4 To return to the Memory Stick Setup Menu, move the joystick to highlight Menu↩ and press ⊕.

If a blank square appears instead of the thumbnail image, this indicates that the image does not support a thumbnail view and cannot be rotated.

Using the Menus

Overview

The Menu gives you access to the following features:

Menu Icon	Description	Page
Video	Allows you to make adjustments to your picture settings. It also allows you to customize the Picture Mode based on the type of program you are viewing, select Advanced Video options, and more.	72
Audio	Offers enhanced audio options such as listening to second audio programming (SAP) or customizing the Effect of the sound on your TV.	74
Screen	Allows you to make Wide Mode adjustments and make changes to the screen's vertical center.	76
Channel	Allows you to set up a Favorite Channel list, run the Auto Program function, skip and label channels, and more.	78
Parent	Lets you control the viewing of programs based on their ratings.	80
Setup	Provides options for setting up your system, including selecting closed caption modes, setting the Timer, labeling video inputs, selecting the language of the on-screen menus, and more.	83

Press MENU to enter and exit Menus.

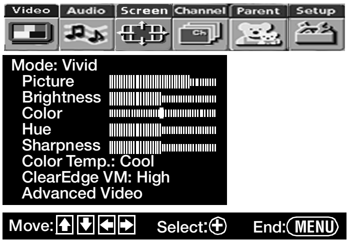
Navigating Through Menus

To Do This ...	Press
Display the Menu	MENU
Move through the Menus	← →
Move through the Menu options	↑ ↓
Select an option to change	⊕
Change an option's settings	↑ ↓ ← →
Select (confirm) changed setting	⊕ or ←
Exit the Menu	MENU

Menus include navigation help text that appears at the bottom of each Menu.

Using the Video Menu

To select the Video Menu



Mode: Vivid
Picture
Brightness
Color
Hue
Sharpness
Color Temp.: Cool
ClearEdge VM: High
Advanced Video

1. Press MENU.
2. Move the joystick ← or → to highlight the Video icon and press ⊕.
3. Move the joystick to highlight an option. Press ⊕ to select an option.
4. Move the joystick ↑ ↓ ← → to change settings. Press ⊕ to select the changed setting.
5. Press MENU to exit the Menu.

To restore the factory default settings for the Video settings (excluding Advanced Video) of the Mode (Vivid, Standard, etc.) the TV is set to:

❑ Press RESET on the remote control when in the Video Menu.

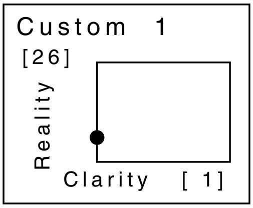
Selecting Video Options

To change from one Mode to another, use the PIC MODE button on the remote control.

You can alter the Video Menu settings (Picture, Brightness, Color, etc.) for each Mode.

The Video Menu includes the following options:

Option	*Description*	
Mode *Customized picture viewing*	Vivid	Select for enhanced picture contrast and sharpness.
	Standard	Select for standard picture settings.
	Movie	Select to display a softer picture.
	Pro	Select to display a picture with minimum enhancements.
Picture	Adjust to increase picture contrast and deepen the color, or decrease picture contrast and soften the color.	
Brightness	Adjust to brighten or darken the picture.	
Color	Adjust to increase or decrease color intensity.	
Hue	Adjust to increase or decrease the green tones.	
Sharpness	Adjust to sharpen or soften the picture.	
Color Temp. *White intensity adjustment*	Cool	Select to give the white colors a blue tint.
	Neutral	Select to give the white colors a neutral tint.
	Warm	Select to give the white colors a red tint (NTSC-Standard).

Option	Description		
ClearEdge VM *Velocity Modulation*	Sharpens picture definition to give every object a sharp, clean edge. Select from High, Medium, Low, Off.		
Advanced Video	Select Program to choose among the DRC Mode and DRC Palette options while viewing NTSC sources.		
	DRC Mode	Creates a high-resolution picture with 4x density, for high quality sources (i.e., DVD player, satellite receiver).	
		Interlaced	Recommended for moving pictures.
		Progressive	Recommended for still images and text.
		CineMotion	Provides an optimized display by automatically detecting film content and applying a reverse 3/2 pulldown process. Moving pictures will appear clearer and more natural-looking.
	DRC Palette	Allows you to customize the level of detail (Reality) and smoothness (Clarity) for up to three input sources. For example, you can create one Custom setting to optimize your cable input's picture, and create another to optimize your DVD player's picture. You can switch among the three Custom settings using the DRC PALETTE button on the remote control. 1 Move the joystick to highlight Custom 1, Custom 2, or Custom 3 and then press ⊕. The DRC palette appears.  2 Move the joystick to adjust the position of the marker (●). As you move the ● higher along the Reality axis, the picture becomes more detailed. As you move the ● to the right along the Clarity axis, the picture becomes smoother. 3 To save the setting, press ⊕. To return the Custom options to the default factory settings, press the RESET button.	

To change quickly from one DRC Mode to another, use the DRC MODE button on the remote control.

Advanced Video options are not available (grayed out) when watching 480p, 720p, and 1080i sources.

To change quickly from one DRC Palette to another, use the DRC PALETTE button on the remote control.

For best results, adjust the Reality by moving the joystick ↑ ↓ until you are satisfied with the level of detail. Then adjust the Clarity by moving the joystick ← → until you have a smooth image.

Using the Audio Menu

To select the Audio Menu

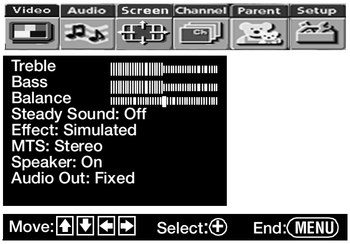
1 Press MENU.

2 Move the joystick ← or → to highlight the Audio icon and press ⊕.

3 Move the joystick to highlight an option. Press ⊕ to select an option.

4 Move the joystick ↑ ↓ ← → to change settings. Press ⊕ to select the changed setting.

5 Press MENU to exit the Menu.



Treble
Bass
Balance
Steady Sound: Off
Effect: Simulated
MTS: Stereo
Speaker: On
Audio Out: Fixed

Move: ↑ ↓ ← →   Select: ⊕   End: MENU

To restore the factory default settings for Treble, Bass, and Balance

- ☐ Press RESET on the remote control when in the Audio Menu.

Selecting Audio Options

To change quickly from one Effect to another, use the ♪ button on the inside panel of the remote control.

The Audio Menu includes the following options:

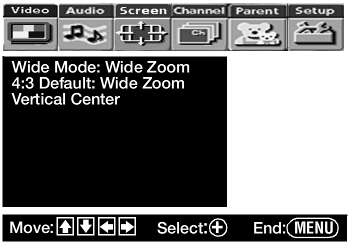
Option	Description	
Treble	Adjust to decrease or increase higher-pitched sounds.	
Bass	Adjust to decrease or increase lower-pitched sounds.	
Balance	Adjust to emphasize left or right speaker balance.	
Steady Sound	Auto	Select to stabilize the volume.
	Off	Select to turn off Steady Sound.
Effect	TruSurround	Select for surround sound (for stereo programs only).
	Simulated	Adds a surround-like effect to mono programs.
	Off	Normal stereo or mono reception.
MTS *Enjoy stereo, bilingual and mono programs*	Stereo	Select for stereo reception when viewing a program broadcast in stereo.
	Auto SAP	Select to automatically switch the TV to second audio programs when a signal is received. (If no SAP signal is present, the TV remains in Stereo mode.)
	Mono	Select for mono reception. (Use to reduce noise during weak stereo broadcasts.)

Option	Description	
Speaker	On	Select to turn on the TV speakers.
	Off	Select to turn off the TV speakers and listen to the TV's sound only through your external audio system speakers.
Audio Out *Easy control of volume adjustments*	This option can be set only when the Speaker option is set to Off.	
	Variable	The TV's speakers are turned off, but the audio output from your audio system can still be controlled by the TV's remote control.
	Fixed	The TV's speakers are turned off and the audio output of the TV is fixed. Use your audio receiver's remote control to adjust the volume (and other audio settings) through your audio system.

Using the Screen Menu

To select the Screen Menu

1. Press MENU.
2. Move the joystick ← or → to move to the Screen icon and press ⊕.
3. Move the joystick ↑ or ↓ to move to an option. Press ⊕ to select an option.
4. Move the joystick ← → ↑ ↓ to change settings. Press ⊕ to select the changed setting.
5. Press MENU to exit the Menu.



Wide Mode: Wide Zoom
4:3 Default: Wide Zoom
Vertical Center

Selecting Screen Mode Options

To change from one Wide Mode to another, use the WIDE MODE button on the remote control.

For Wide Zoom and Zoom modes, you can adjust the vertical position of the picture. For details, see page 77.

The Screen menu includes the following options:

Option	Description	
Wide Mode *Select a Wide Mode to use for 4:3 sources.*	Wide Zoom	Select to enlarge the 4:3 size picture, while the upper and lower parts of the picture are condensed to fit the wide screen.
	Normal	Select to return the 4:3 picture to normal mode.
	Full	Select to enlarge the 4:3 picture horizontally only, to fill the wide screen.
	Zoom	Select to enlarge the 4:3 picture horizontally and vertically to an equal aspect ratio that fills the wide screen.
	Wide Mode is unavailable while in Twin View, or when viewing HD (1080i, 720p) sources.	

In some cases, wide-screen programs will be shown in aspect ratios that require the display of black bands at the top and bottom of your 16:9 screen. For more details, see page 92.

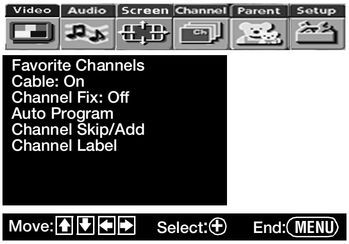
If 4:3 Default is set to anything but Off, the Wide Mode setting changes only for the current channel. When you change channels (or inputs), Wide Mode is automatically replaced with the 4:3 Default setting. To retain the current Wide Mode setting as channels and inputs are changed, set 4:3 Default to Off.

Option	Description	
4:3 Default *Select the default Screen Mode to use for 4:3 sources*	Wide Zoom	Select to enlarge the 4:3 size picture, while the upper and lower parts of the picture are condensed to fit the wide screen.
	Normal	Select to return the 4:3 picture to normal mode.
	Full	Select to enlarge the 4:3 picture horizontally only, to fill the wide screen.
	Zoom	Select to enlarge the 4:3 picture horizontally and vertically to an equal aspect ratio that fills the wide screen.
	Off	Select to continue using the current Wide Mode setting when the channel or input is changed.
Vertical Center	Allows you to move the position of the picture up and down in the window. (Available only in Wide Zoom and Zoom modes.) Move the joystick ↑ or ↓ and press ⊕ to choose a correction between +15 and -15 (Zoom mode), and +10 and -10 (Wide Zoom mode).	

Using the Channel Menu

To select the Channel Menu

1. Press MENU.
2. Move the joystick ← or → to highlight the Channel icon and press ⊕.
3. Move the joystick to highlight an option. Press ⊕ to select an option.
4. Move the joystick ↑ ↓ ← → to change settings. Press ⊕ to select the changed setting.
5. Press MENU to exit the Menu.



Favorite Channels
Cable: On
Channel Fix: Off
Auto Program
Channel Skip/Add
Channel Label

Selecting Channel Options

The Channel Menu includes the following options:

Option	*Description*	
Favorite Channels	Lets you set up a list of your favorite channels. For details, see "Using Favorite Channels" on page 62.	
Cable	On	Select if you are receiving cable channels with a CATV cable.
	Off	Select if you are using an antenna.
	✍ **You should run Auto Program after changing this option.**	
Channel Fix *Useful when you have a cable box or satellite receiver connected*	Off	Turns off Channel Fix.
	2-6	"Fix" your TV's channel setting to 2-6 and use the cable box or satellite receiver to change channels. Select one of these settings if you connected the equipment to the VHF/UHF jack.
	AUX 2-6	Same as 2-6, except you select one of these settings if you connected the equipment to the AUX jack (see page 17).
	Video 1	Use this setting if you have connected the equipment to the A/V input jacks.
Auto Program	Automatically sets up the channel list on the TV for all receivable channels.	

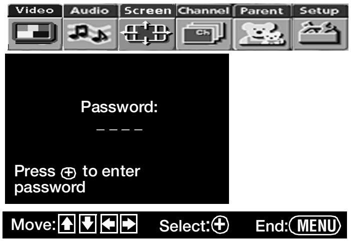
Channels that you set to be skipped can be accessed only with the 0-9 buttons.

Channel Label is not available (grayed out) when watching 480p, 720p, and 1080i sources.

Option	Description
Channel Skip/Add	Allows you to customize the channel list that appears when you use the CH+/- buttons. 1 Move the joystick ↑ or ↓ to scroll through the channels until you find the channel you want to skip or add. Then press ⊕ to select it. 2 Move the joystick ↑ or ↓ to toggle between Add or Skip. Then press ⊕ to select. 3 To add or skip more channels, repeat steps 1 and 2. 4 Move the joystick ← to return to the Channel Menu, or press MENU to exit the Menus.
Channel Label	Allows you to assign labels (such as station call letters) to channel numbers. You can label up to 20 channels. 1 Move the joystick to highlight Channel and press ⊕. 2 Move the joystick ↑ ↓ to scroll through the channel numbers (1-125). Then press ⊕ to select the channel number that you want to assign a label. 3 Move the joystick to highlight Label and press ⊕. 4 Move the joystick ↑ ↓ to scroll through the label characters (A-Z, 0-9, etc.). Then press ⊕ to select the highlighted character. 5 Repeat to add up to 5 characters to the label. 6 To assign labels to more channels, repeat steps 1-4. 7 Move the joystick ← to return to the Channel Menu, or press MENU to exit the Menus.

Using the Parent Menu

The Parent Menu allows you to set up the TV to block programs according to their content and rating levels.



Password:
– – – –

Press ⊕ to enter password

To select the Parent Menu

1. Press MENU.
2. Move the joystick ← or → to highlight the Parent icon and press ⊕.
3. Use the 0-9 buttons on the remote control to enter a four-digit password.
4. If this is the first time you are creating this password, confirm the password by entering it again. (The Parent Menu options appear.)
5. Move the joystick ↑ ↓ ← → to change settings. Press ⊕ to select the changed setting.
6. Press MENU to exit the Menu.

You need your password for any future access into the Parent Menu. If you lose your password, see "Lost password" on page 94.

Selecting Parent Options

If you are not familiar with the Parental Guideline rating system, you should select Child, Youth, or Young Adult to help simplify the rating selection. To set more specific ratings, select Custom.

For descriptions of Child, Youth, and Young Adult ratings, see page 81.

The Parent Menu includes the following options:

Option	Description	
Parental Lock *Turn ratings on/off and select a rating system*	Off	Parental lock is off. No programs are blocked from viewing.
	Child	Maximum ratings permitted are: ❏ US: TV-Y, TV-G, G ❏ Canada: C, G, TV-Y
	Youth	Maximum ratings permitted are: ❏ US: TV-PG, PG ❏ Canada: C8+, PG, 8 ans+, TV-PG
	Y. Adult	Maximum ratings permitted are: ❏ US: TV-14, PG-13 ❏ Canada: 14+, 13 ans+, TV-14
	Custom	Select to set ratings manually. ❏ US: See page 81 for details. ❏ Canada: See page 82 for details.
Change Password	For changing your password.	
Select Country	U.S.A.	Select to use USA ratings (see page 81).
	Canada	Select to use Canadian ratings (see page 82).

US Models: Selecting Custom Rating Options

For US models, the Custom Rating Menu includes the following options. (For Canadian models, see page 82.)

Option	Description	
Movie Rating	G	All children and General Audience.
	PG	Parental Guidance suggested.
	PG-13	Parental Guidance for children under 13.
	R	Restricted viewing, parental guidance is suggested for children under 17.
	NC-17 and X	No one 17 or under allowed.
TV Rating *Block programs by their rating, content or both*	Age-Based Ratings	
	TV-Y	All children.
	TV-Y7	Directed to children age 7 and older.
	TV-G	General Audience.
	TV-PG	Parental Guidance suggested.
	TV-14	Parents Strongly cautioned.
	TV-MA	Mature Audience only.
	Content-Based Ratings	
	FV	Fantasy Violence.
	D	Suggestive Dialogue.
	L	Strong Language.
	S	Sexual situations.
	V	Violence.
Unrated *Block programs or movies that are broadcast without a rating*	Block	Blocks all programs and movies that are broadcast without a rating.
	Allow	Allows programs and movies that are broadcast without a rating.

The Content-Based Ratings are linked to the level of the Age-Based Rating. For example, a program with an Age-Based Rating of TV-PG V (Violence) rating may contain moderate violence, while a TV-14 V (Violence) rating may contain more intense violence.

To ensure maximum blocking capability, set the Age-Based Ratings.

If you block unrated TV programs, be aware that the following types of programs may be blocked: programs broadcast from another country, emergency broadcasts, political programs, sports, news, public service announcements, religious programs and weather.

Viewing Blocked Programs

You can view blocked programs by entering the password. Press the ENTER button when tuned to a blocked program, then enter the password. This temporarily switches off the Parental Lock. To reactivate the Parental Lock settings, turn off the TV. When the TV is turned on again, your Parental Lock settings are reactivated.

Canadian Models: Selecting Custom Rating Options

For Canadian models, the Custom Rating Menu includes the following options. (For US models, see page 81.)

Option	Description	
English Rating	C	All children.
	C8+	Children 8 years and older.
	G	General programming.
	PG	Parental Guidance.
	14+	Viewers 14 and older.
	18+	Adult programming.
French Rating	G	General programming.
	8 ans+	Not recommended for young children.
	13 ans+	Not recommended for ages under 13.
	16 ans+	Not recommended for ages under 16.
	18 ans+	Programming restricted to adults.
U.S.A. Rating	See "US Models" on page 81 for details.	

Viewing Blocked Programs

You can view blocked programs by entering the password. Press the ENTER button when tuned to a blocked program, then enter the password. This temporarily switches off the Parental Lock. To reactivate the Parental Lock settings, turn off the TV. When the TV is turned on again, your Parental Lock settings are reactivated.

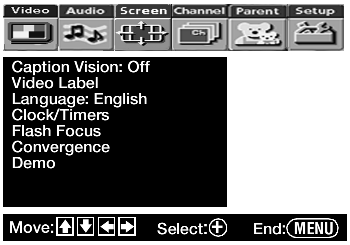
Using the Setup Menu

To select the Setup Menu

1 Press MENU.

2 Move the joystick ← or → to highlight the Setup icon and press ⊕.

3 Move the joystick to highlight an option. Press ⊕ to select an option.



Caption Vision: Off
Video Label
Language: English
Clock/Timers
Flash Focus
Convergence
Demo

4 Move the joystick ↑ ↓ ← → to change settings. Press ⊕ to select the changed setting.

5 Press MENU to exit the Menu.

To move from within one Menu to the main Menu of icons, move the joystick ←.

Selecting Setup Options

The Setup Menu includes the following options:

Option	Description	
Caption Vision	Allows you to select from three closed caption modes (for programs that are broadcast with closed caption).	
	CC1, CC2, CC3, CC4	Displays a printed version of the dialog or sound effects of a program. (Should be set to CC1 for most programs.)
	Text1,Text2, Text3,Text4	Displays network/station information presented using either half or the whole screen (if available). For closed captioning, set to CC1.
	Info	Displays the program name and the time remaining in the program (if the broadcaster offers this service). Displays when the channel is changed or the DISPLAY button is pressed.
	Off	Turns off Caption Vision.

The Skip label is useful for inputs that do not have equipment connected to them.

To go directly to programming Timer 1 or 2, press ⊕ instead of moving the joystick →.

<table>
<tr><th>Option</th><th>Description</th></tr>
<tr><td>Video Label</td><td>Allows you to identify A/V equipment you connected to the TV, such as a VCR, DVD, etc. For example, if you have a DVD player connected to the VIDEO 5 jack, you can select the label DVD for the VIDEO 5 input. Then when you press the TV/VIDEO button to change inputs, the Video Label you assigned to that input appears on screen.
1 Move the joystick ↑ or ↓ to highlight the video input (VIDEO 1-7) to which you want to assign a label. Then press ⊕ to select the input.
2 Move the joystick ↑ or ↓ to highlight one of the displayed labels. Then press ⊕ to select the label.
You can select from the following labels for each input:
<table>
<tr><td>Video 1/2/3/4</td><td>VHS, DVD, Receiver, Satellite, Cable Box, 8mm, DTV, Game, LD, Web, Beta, Skip</td></tr>
<tr><td>Video 5/6/7</td><td>DVD, Satellite, Cable Box, DTV, HD, Skip</td></tr>
</table>
✍ If you select Skip, your TV skips this input when you press the TV/VIDEO button.</td></tr>
<tr><td>Language</td><td>Select to display all on-screen Menus in your language of choice.</td></tr>
<tr><td>Clock/Timers</td><td>Select to set the clock and to program your TV to turn on and off at two scheduled viewing times.
<table>
<tr><td>Timer 1
Timer 2</td><td>You can use the Timers to program the TV to turn on and off and tune to a specific channel at two scheduled viewing times.</td></tr>
</table>
Timer 1 and Timer 2 are not available to be set until you set the Current Time.
1 Move the joystick ↑ or ↓ to highlight Timer 1 or Timer 2. To set the timer, move the joystick →.
2 Move the joystick ↑ or ↓ to highlight one of the following options, then press ⊕.
<table>
<tr><td>Program</td><td>Select to set the Timer by day, time, duration, and channel.</td></tr>
<tr><td>Off</td><td>Select to turn off the Timer. (Your previous settings are saved.)</td></tr>
</table>
3 If you selected Program in step 2, move the joystick ↑ and ↓ to set the day(s), hour, minute, duration, and channel number. Press ⊕ or move the joystick → to confirm each setting and move to the next setting. Move the joystick ← to go back to the previous setting.
4 Press MENU to exit the Menu. An LED on the front panel will light, indicating the timer has been set.</td></tr>
</table>

Option	Description
Clock/Timers (continued)	Current Time 1 Press ⊕ to select Current Time. 2 Move the joystick ↑ and ↓ to set the current time (day, hour, and minute). Press ⊕ (or move the joystick →) to confirm each setting and move to the next setting. Move the joystick ← to go back to the previous setting. 3 Press MENU to exit the Menu.
Flash Focus	Allows you to adjust the convergence automatically. For details, see page 44.
Convergence	Allows you to fine-tune the convergence manually. For details, see page 45.
Demo	Runs a demonstration of on-screen Menus.

You can also access Flash Focus by pressing the FLASH FOCUS button on the front panel of the TV. For details, see pages 14-15.

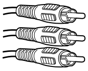
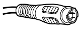
Other Information

Overview

This chapter includes the following topics:

Topic	Page
Glossary	88
Notes on Using Memory Stick Media	89
Contacting Sony	90
Troubleshooting	90
Specifications	95
Optional Accessories	96
Index	97

Glossary

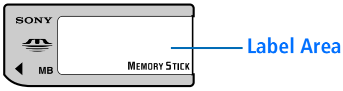
analog signal	A signaling method that uses continuous changes in the amplitude or frequency of an electronic transmission to convey information.
aspect ratio	Refers to the ratio between the width and height of the screen. This TV has a 16:9 (widescreen) aspect ratio, as opposed to a 4:3 aspect ratio. 4:3 aspect ratio 16:9 aspect ratio
component video 	Component video is sent through three cables: two color shade (chrominance) signals and one brightness (luminance) signal. Component video achieves greater color accuracy than composite video or S VIDEO by splitting chrominance into two separate portions.
composite video 	Composite video is sent through a single cable. Composite video combines the color shade (chrominance) and brightness (luminance) information into one video signal.
digital television (DTV)	A new technology for transmitting and receiving broadcast television signals. DTV provides higher resolution and improved sound quality over analog television.
National Television System Committee (NTSC)	A unit of the Federal Communications Commission, Washington, DC, that establishes television standards in the United States, such as NTSC Color, the standard used in this TV.
RF	Radio Frequency. That part of the frequency spectrum in which it is possible to radiate (transmit) electromagnetic waves.
S VIDEO 	S VIDEO requires a single cable, which carries the brightness (luminance) and color (chrominance) signals of the picture separately. S VIDEO provides better resolution than composite video, which carries the signals together.
VHF/UHF	VHF (Very High Frequency) is the part of the radio spectrum from 30 to 300 megahertz. UHF (Ultra High Frequency) is the part of the radio spectrum from 300 to 3,000 megahertz.
480i	Provides 480 lines of resolution. Displays images using interlaced scanning, which first transmits all the odd lines on the TV screen and then the even lines.
480p	Provides 480 lines of resolution. Displays images using progressive scanning, which transmits each line from top to bottom.
720p	Provides 720 lines of resolution. Displays images using progressive scanning, which transmits each line from top to bottom.
1080i	Provides 1080 lines of resolution. Displays images using interlaced scanning, which first transmits all the odd lines on the TV screen and then the even lines. 1080i is one of the formats used by HDTV (High Definition TV).

Notes on Using Memory Stick Media

Memory Stick Precautions

When using Memory Stick media, follow these precautions:

- To avoid permanent damage to still image data, do not turn off the TV or remove Memory Stick media from the insertion slot while data is being read (as indicated by the Memory Stick indicator light being on).
- Avoid touching the terminal of Memory Stick media or bringing it into contact with a metal object.
- Do not drop, bend, or submit Memory Stick media to external shock.
- Do not disassemble or modify Memory Stick media.
- Avoid getting liquid on Memory Stick media.
- Apply labels only within the designated label area.



- To avoid permanent damage to still image data, do not use or store Memory Stick media in a location subject to:
  - High temperature (such as near a heater or inside a hot car)
  - High humidity
  - Direct sunlight
  - Corrosive substances
  - Magnetic fields
  - Excessive dust
  - Static electricity or electric noise
- Store and carry Memory Stick media in its original case to ensure protection of stored data.
- Save a backup of stored data.

Contacting Sony

If, after reading these operating instructions, you have additional questions related to the use of your Sony television, please call our Customer Information Services Center at 1-800-222-SONY (7669) (US residents only) or (416) 499-SONY (7669) (Canadian residents only).

Troubleshooting

If you are having problems with your TV, you can reset all the TV’s settings to their original factory default settings, as follows.

✍ **Notice: The following procedure resets all custom settings, channel lists, etc., to the factory default settings.**

1. Turn on the TV.
2. Hold down the RESET button on the remote control.
3. Press the POWER button on the front panel of the TV.
4. Release the RESET button on the remote control.

Twin View

Problem	*Possible Remedies*
I cannot get Twin View to work	❑ If you are using a cable box to unscramble all channels (as shown on page 24), you cannot use the Twin View feature. This is because the cable box can unscramble only one channel at a time. But if you need the cable box to unscramble only some (usually premium) channels, you can use Twin View for unscrambled channels if you connect both a cable and cable box, as shown on page 22. ❑ You can use Twin View to view a signal from a different source that is connected to the TV's A/V jacks (such as a VCR or DVD player) in the second window by pressing the TV/VIDEO button while in Twin View. ❑ Sources connected to the AUX, VIDEO 5, VIDEO 6, and VIDEO 7 inputs display in the left Twin View window, but not the right.
There is no Twin View window, or it is just static	❑ Be sure the Twin View window is set to a video input or channel that has a signal airing. ❑ You might be tuned to a video input with nothing connected to it. Try cycling through the video inputs by pressing the TV/VIDEO button. ❑ If you connected equipment to the TV’s AUX jack, it will display in the left Twin View window, but not the right.
Twin View cannot display anything but TV channels	❑ Try cycling through the video inputs by pressing the TV/VIDEO button. Check that the Video Label option is not set to Skip. (See the Setup Menu on page 84.)
Twin View displays the same program in both windows	❑ Both Twin View windows might be set to the same channel. Try changing channels in either window.

Remote Control

Problem	Possible Remedies
Remote control does not operate	❑ The batteries could be weak. Replace the batteries. ❑ Check the orientation of the batteries. ❑ Press the TV FUNCTION button. You may have inadvertently pressed the SAT/CABLE FUNCTION button, which changes the remote control to SAT or CABLE mode. ❑ Make sure the TV's power cord is connected securely to the wall outlet. ❑ Locate the TV at least 3-4 feet away from fluorescent lights.
Cannot change channels with the remote control	❑ If you are using the TV to change channels, first press the TV FUNCTION button. ❑ If you are using another device to change channels, be sure you have not inadvertently switched your TV from the channel 3 or 4 setting. Use the Channel Fix option to "fix" the channel based on the hookup you used (see page 78). ❑ If you are using another device to change channels, be sure to press the FUNCTION button for that device. For example, if you are using your cable box to change channels, be sure to press the SAT/CABLE FUNCTION button.
Remote control does not operate non-Sony video equipment	❑ If you replaced the batteries to the remote recently, the code numbers for the video equipment may need to be reset. ❑ There may be more than one code for the equipment that you are attempting to operate. ❑ There is a possibility that some non-Sony equipment cannot be operated by your Sony TV remote.You may need to use the equipment's original remote control.

Memory Stick

Problem	Possible Remedies
Image does not display	❑ Make sure the image is supported by the TV (see pages 64-65). ❑ Make sure the Memory Stick is inserted properly (see page 66). ❑ Memory Stick functions are not available while using Twin View, Freeze or Favorite Channel functions.
Blank square appears instead of a thumbnail image	❑ This indicates that the image does not support a thumbnail view. Selecting the icon, however, displays the full-size image on the screen. It could also indicate that both the thumbnail and full-size images are corrupted or not supported.
Cannot rotate image, no thumbnail appears	❑ Be sure the LOCK switch on the Memory Stick is set to off. ❑ If a blank square appears instead of the thumbnail image, this indicates that the image does not support a thumbnail view and cannot be rotated.
Cannot hear audio while using Memory Stick	❑ There is no audio available while using Memory Stick.
Image file name does not appear; instead, dashes (---) appear	❑ Dashes appear instead of the file name if the image was recorded using equipment that is not DCF-compliant. Dashes also appear if a DCF-compliant file was renamed.

Video

Problem	Possible Remedies
No picture (screen not lit), no sound	☐ If your TV does not turn on, and a red light keeps flashing, your TV may need service. Call your local Sony Service Center. ☐ Make sure the power cord is plugged in. ☐ Press the POWER button on the front of the TV. ☐ Press the TV/VIDEO button to cycle through the connected video sources. ☐ Try another channel; it could be station trouble.
Dark, poor or no picture (screen lit), good sound	☐ Adjust the Picture option in the Video Menu (see page 72). ☐ Adjust the Brightness option in the Video Menu (see page 72). ☐ Check the antenna/cable connections.
No color	☐ Adjust the Color option in the Video Menu (see page 72).
Only snow and noise appear on the screen	☐ Check the antenna/cable connections. ☐ Try another channel; it could be station trouble. ☐ Press ANT to change the input mode (see page 48).
Dotted lines or stripes	☐ Adjust the antenna. ☐ Move the TV away from noise sources such as cars, neon signs, or hair-dryers.
Double images or ghosts	☐ Using a highly directional outdoor antenna or a cable may solve the problem.
"Black box" on screen	☐ You have selected a text option in the Setup Menu and no text is available. (See page 83 to reset Setup selections.) To turn off this feature, set the Caption Vision option to Off. If you were trying to select closed captioning, select CC1 instead of TEXT 1-4.
Black bands appear at the top and bottom of the screen	☐ Some wide-screen programs are filmed in aspect ratios that are greater than 16:9 (this is especially common with theatrical releases). Your TV will show these programs with black bands at the top and bottom of the screen. For more details, check the documentation that came with your DVD (or contact your program provider).
Certain programs on DVD or other digital sources display a loss of detail, especially during fast-motion or dark scenes	☐ The compression used by certain digital broadcasts and DVDs may cause your TV's screen to display less detail than usual, or cause artifacts (small blocks or dots, pixelations) to appear on your screen. This is due to your TV's large screen and ability to show very fine detail, and is normal for certain digitally recorded programs. Adjust the reality/clarity in the DRC Palette menu (see page 73) to optimize the picture while viewing these sources.

Audio

Problem	Possible Remedies
Good picture, no sound	❑ Press MUTING so that Muting disappears from the screen (see page 48). ❑ Make sure the Speaker option is set to On in the Audio Menu (see page 75).
Cannot gain enough volume when using a cable box	❑ Increase the volume of the cable box using the cable box's remote control. Then press TV FUNCTION and adjust the TV's volume.
Sound seems weak or insufficient	❑ The TV's audio might be set to Auto SAP or Mono, when it might be better set to Stereo. In the Audio Menu (see page 74), set the MTS setting to Stereo. If already set to Stereo, switch to Mono (which may reduce background noise during weak stereo broadcasts).
Cannot raise the volume on external audio speakers	❑ If the Speaker option is set to Off and the Audio Out option is set to Fixed (in order to output the sound to your audio system) use your audio receiver to adjust the sound (see page 74). Or, to use the TV remote control, set the Audio Out option to Variable. ❑ To turn on the TV speakers, set the Speaker option to On (see page 74).

Channels

Problem	Possible Remedies
Cannot receive upper channels (UHF) when using an antenna	❑ Change the Cable option to Off (see page 78). ❑ Use Auto Program in the Channel Menu to add receivable channels that are not presently in the TV's memory (see page 78).
TV is fixed to one channel	❑ Use Auto Program in the Channel Menu to add receivable channels that are not presently in the TV's memory (see page 78). ❑ Check your Channel Fix settings (see page 78).
Cannot receive any channels when using cable TV	❑ Use Auto Program in the Channel Menu to add receivable channels that are not presently in the TV's memory (see page 78). ❑ Make sure the Cable option is set to On in the Channel Menu (see page 78).
Cannot receive or select channels	❑ Use Auto Program in the Channel Menu to add receivable TV channels that are not presently in TV memory (see page 78).

General

Problem	Possible Remedies
How to reset TV to factory settings	❑ Turn on the TV. While holding down the RESET button on the remote control, press the POWER button on the TV. (The TV will turn itself off, then back on again.) Release the RESET button.
How to restore Video settings to factory settings	❑ Press the RESET button on the remote control while in the Video Menu (see page 72).
How to restore Audio settings to factory settings	❑ Press the RESET button on the remote control while in the Audio Menu (see page 74).
Cannot cycle through the other video equipment connected to the TV	❑ Be sure the Video Label option is not set to Skip (see page 84).
Cannot operate Menu	❑ If a menu option appears in gray, this indicates that the TV is in a state in which the menu option is not available.
Lost password	❑ In the password screen (see page 80), enter the following master password: 4357. The master password clears your previous password; it cannot be used to temporarily unblock channels.
LED on front panel is lit	❑ The STAND BY LED (see page 14) blinks when the TV is turned on, then shuts off when the picture is displayed. If the LED blinks continuously, this may indicate the TV needs service. ❑ The TIMER LED (see page 14) indicates that the timer is set. When the timer is set, this LED will remain lit even when the TV is turned off.

Specifications

Projection System	3 picture tubes, 3 lenses, horizontal in-line system	
Picture Tube	7-inch high-brightness monochrome tubes (6.3 raster size), with optical coupling and liquid cooling system	
Projection Lenses	High performance, large diameter hybrid lens F1.1	
Antenna	75 ohm external terminal for VHF/UHF	
Television System	NTSC, American TV Standard	
Channel Coverage	VHF	2-13
	UHF	14-69
	CATV	1-125
Power Requirements	120V, 60 Hz	
Inputs/Outputs		
DVI-HDTV	1 terminal, 3.3V T.M.D.S., 50 ohms The DVI-HDTV input terminal is compliant with the EIA-861 standard and is not intended for use with personal computers.	
Video (IN)	4 total (1 on front panel)	1 Vp-p, 75 ohms unbalanced, sync negative
S Video (IN)	3 total (1 on front panel)	Y: 1 Vp-p, 75 ohms unbalanced, sync negative C: 0.286 Vp-p (Burst signal), 75 ohms
Audio (IN)	7 total (1 on front panel)	500 mVrms (100% modulation) Impedance: 47 kilohm
Component Video Input	2 (Y, P_B, P_R)	Y: 1.0 Vp-p, 75 ohms unbalanced, sync negative; P_B: 0.7 Vp-p, 75 ohms P_R: 0.7 Vp-p, 75 ohms
CONTROL S (IN/OUT)	1	
Variable/Fixed Audio (OUT)	1	More than 408 mVrms at the maximum volume setting (Variable) More than 408 mVrms (Fixed) Impedance (output): 2 kilohms
Supplied Accessories	Remote Control	RM-Y188
	AA (R6) Batteries	2 supplied for remote control
Screen Size (measured diagonally)	KP-57WV600/700	57 inches
	KP-65WV600/700	65 inches
Speaker Output	20W x 2	
Dimensions (W x H x D)	KP-57WV600/700	1361 x 1394 x 689 mm (53 $\frac{5}{8}$ x 54 $\frac{15}{16}$ x 27 $\frac{1}{8}$ in)
	KP-65WV600/700	1542 x 1516 x 735 mm (60 $\frac{3}{4}$ x 59 $\frac{3}{4}$ x 28 $\frac{15}{16}$ in)
Mass	KP-57WV600/700	98Kg (216 lbs)
	KP-65WV600	136Kg (300 lbs)
	KP-65WV700	134Kg (295 lbs)
Power Consumption	In Use	295 W
	In Standby	Under 1 W

Design and specifications are subject to change without notice.

Optional Accessories

- A/V Cable (VMC-810/820/830 HG)
- Audio Cable (RKC-515HG)
- Component Video Cable (VMC-10/30 HG)
- Control S Cable (RK-G69HG)
- Memory Stick media: 8 MB (MSA-8A); 16 MB (MSA-16A); 32 MB (MSA-32A); 64 MB (MSA-64A); 128 MB (MSA-128A)

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SERVICE MANUAL

DA-4X CHASSIS

MODEL NAME	REMOTE COMMANDER	DESTINATION	CHASSIS NO.
KP-57WV600	RM-Y188	US/CND	SCC-P92D-A
KP-57WV700	RM-Y188	US/CND	SCC-P92B-A
KP-65WV600	RM-Y188	US/CND	SCC-P92C-A
KP-65WV700	RM-Y188	US/CND	SCC-P92A-A

CORRECTION- 1

SUBJECT: EXPLODED VIEW COVER DIAGRAMS

Correct the service manual as shown.
File this Correction with the service manual.

☛ : Corrected Item

Section 6: Exploded View
6-1. COVER (KP-57WV600/57WV700 ONLY) (Page 107)
6-2. COVER (KP-65WV600/65WV700 ONLY) (Page 108)

COLOR REAR VIDEO PROJECTOR

SONY®

9-965-926-91

SECTION 6: EXPLODED VIEWS

Components not identified by a part number or description are not stocked because they are seldom required for routine service.

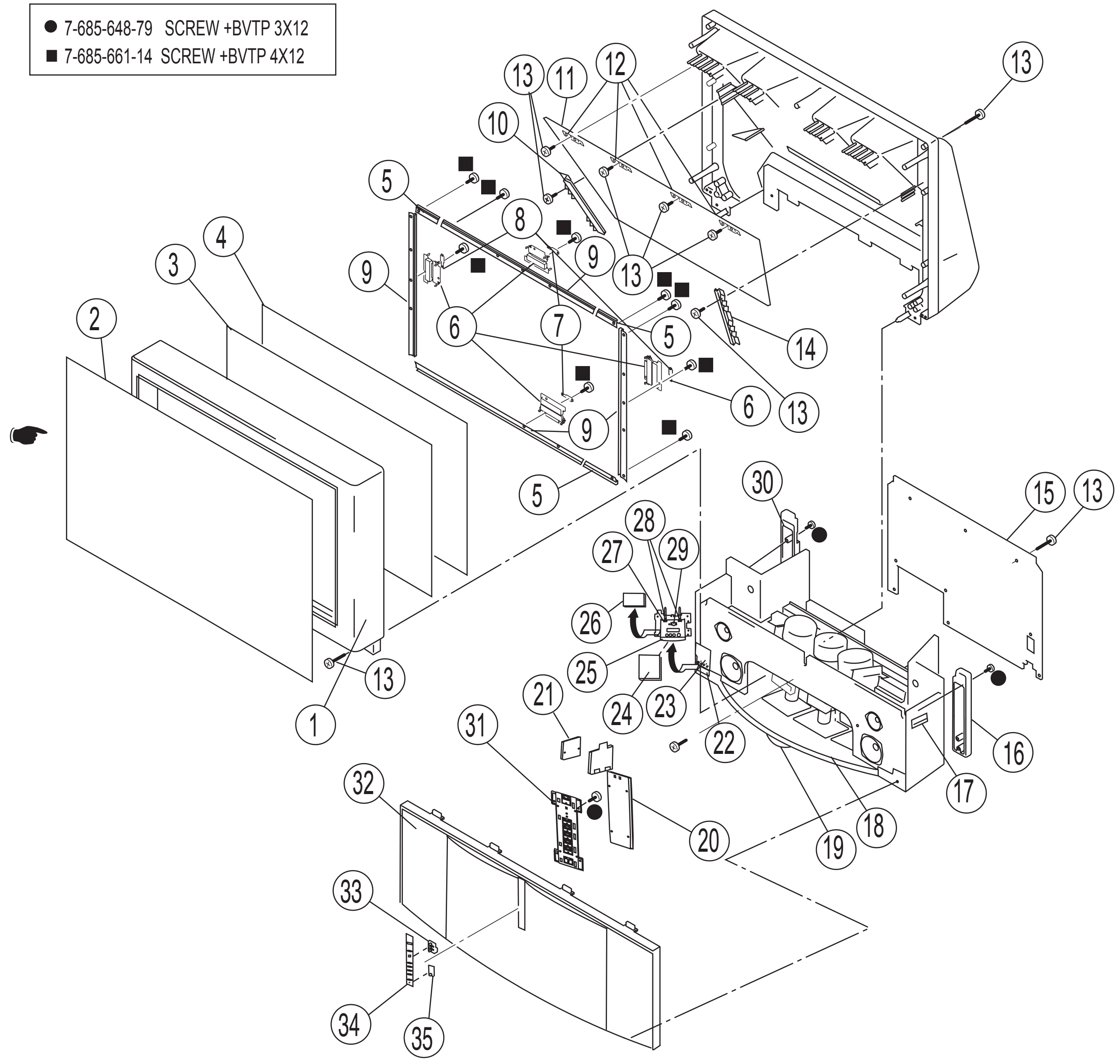
The component parts of an assembly are indicated by the reference numbers in the far right column of the parts list and within the dotted lines of the diagram.

*** Items marked with an asterisk are not stocked since they are seldom required for routine service. Expect some delay when ordering these components.**

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

6-1. COVER (KP-57WV600/57WV700 0NLY)



● 7-685-648-79 SCREW +BVTP 3X12
■ 7-685-661-14 SCREW +BVTP 4X12

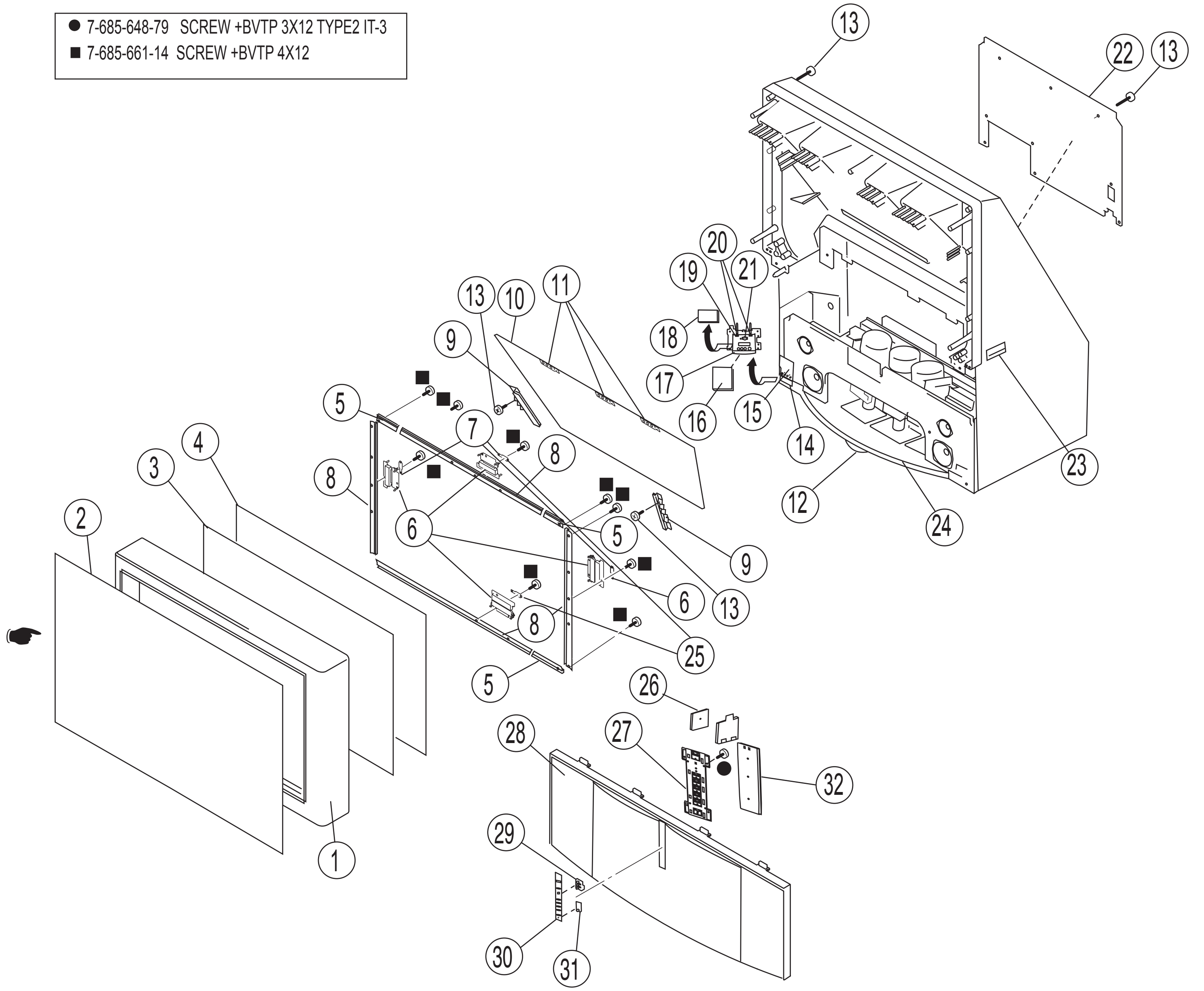
REF.NO.		PART NO.	DESCRIPTION
1		X-4040-450-1	BEZNET ASSY KP-57WV600 ONLY
1		X-4040-448-1	BEZNET ASSY KP-57WV700 ONLY
2		A-1603-725-A	CONTRAST SCREEN ASSY KP-57WV600 ONLY
2		A-1603-723-A	CONTRAST SCREEN ASSY KP-57WV700 ONLY
3		4-088-638-11	PLATE, DIFFUSION (WL) KP-57WV600 ONLY
3		4-088-611-11	PLATE, DIFFUSION (WL) KP-57WV700 ONLY
4		4-088-637-11	PLATE, DIFFUSION (WF) KP-57WV600 ONLY
4		4-088-610-11	PLATE, DIFFUSION (WF) KP-57WV700 ONLY
5	*	4-089-180-01	HOLDER, SCREEN SHORT
6	*	A-1400-759-A	SR MOUNT
7		4-088-460-21	CUSHION, SCREEN
8		4-088-460-31	CUSHION, SCREEN
9	*	4-088-461-01	HOLDER, SCREEN
10	*	4-088-600-01	HOLDER (L), MIRROR
11		4-088-598-01	MIRROR
12	*	4-081-501-01	HOLDER, MIRROR
13		4-081-063-01	SCREW,DOME WASHER HEX TAP 4X20
14	*	4-088-601-01	HOLDER (R), MIRROR
15	*	4-088-115-01	BOARD, REAR KP-57WV600 ONLY
15	*	4-091-605-01	BOARD, REAR KP-57WV700 ONLY
16	*	4-088-630-01	PANEL R, SIDE KP-57WV600 ONLY
16	*	4-088-607-01	PANEL (R), SIDE KP-57WV700 ONLY
17	*	4-088-541-01	HANDLE
18		4-088-631-01	SKIRT, FRONT KP-57WV600 ONLY
18		4-088-603-01	SKIRT, FRONT KP-57WV700 ONLY
19		4-075-020-01	FOOT, PLASTIC
20	*	A-1400-748-A	HA MOUNT
21	*	A-1300-323-A	HM COMPLETE PC BOARD
22		4-088-572-01	LABEL, INPUT TERMINAL
23		4-088-569-01	BRACKET, INPUT TERMINAL
24		4-088-571-01	PLATE, INPUT TERMINAL
25		3-973-975-41	DAMPER, OIL
26	*	A-1400-747-A	HB MOUNT
27		4-088-570-01	COVER, INPUT TERMINAL
28		4-088-573-01	SPRING
29		4-047-464-01	CATCHER, PUSH
30	*	4-088-629-01	PANEL L, SIDE KP-57WV600 ONLY
30	*	4-088-606-01	PANEL (L), SIDE KP-57WV700 ONLY
31		4-088-622-01	BUTTON KP-57WV600 ONLY
31		4-088-585-01	BUTTON KP-57WV700 0NLY
32		X-4040-323-1	GRILLE ASSY, SPEAKER KP-57WV600 ONLY
32		X-4040-326-1	GRILLE ASSY, SPEAKER KP-57WV700 ONLY
33		4-088-588-01	GUIDE, LED
34		4-088-621-01	PANEL, CONTROL KP-57WV600 ONLY
34		4-088-584-01	PANEL, CONTROL KP-57WV700 ONLY
35		4-088-586-01	GUIDE, LED

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

6-2. COVER (KP-65WV600/65WV700 0NLY)

● 7-685-648-79 SCREW +BVTP 3X12 TYPE2 IT-3
■ 7-685-661-14 SCREW +BVTP 4X12



REF.NO.		PART NO.	DESCRIPTION
1		X-4040-449-1	BEZNET ASSY
			KP-65WV600 ONLY
1		X-4040-447-1	BEZNET ASSY
			KP-65WV700 ONLY
2		A-1603-724-A	CONTRAST SCREEN ASSY
			KP-65WV600 ONLY
2		A-1603-722-A	CONTRAST SCREEN ASSY
			KP-65WV700 ONLY
3		4-088-627-11	PLATE, DIFFUSION (WL)
			KP-65WV600 ONLY
3		4-088-594-11	PLATE, DIFFUSION (WL)
			KP-65WV700 ONLY
4		4-088-626-11	PLATE, DIFFUSION (WF)
			KP-65WV600 ONLY
4		4-088-596-11	PLATE, DIFFUSION (WF)
			KP-65WV700 ONLY
5	*	4-089-179-01	HOLDER, SCREEN SHORT
6	*	A-1400-759-A	SR MOUNT
7		4-088-460-11	CUSHION, SCREEN
8	*	4-088-461-01	HOLDER, SCREEN
9		4-088-579-01	HOLDER, MIRROR SLIDE
10	*	4-088-577-01	MIRROR
11	*	4-088-580-01	HOLDER, MIRROR BASE
12		4-075-020-01	FOOT, PLASTIC
13		4-081-063-01	SCREW, DOME WASHER HEX TAP 4 X 20
14		4-088-572-01	LABEL, INPUT TERMINAL
15		4-088-569-01	BRACKET, INPUT TERMINAL
16		4-088-571-01	PLATE, INPUT TERMINAL
17		3-973-975-41	DAMPER, OIL
18	*	A-1400-747-A	HB MOUNT
19		4-088-570-01	COVER, INPUT TERMINAL
20		4-088-573-01	SPRING
21		4-047-464-01	CATCHER, PUSH
22	*	4-088-575-01	BOARD, REAR
23	*	4-088-541-01	HANDLE
24		4-088-620-01	SKIRT, FRONT
			KP-65WV600 ONLY
24		4-088-574-01	SKIRT, FRONT
			KP-65WV700 ONLY
25		4-088-460-01	CUSHION, SCREEN
26	*	A-1300-323-A	HM COMPLETE PC BOARD
27		4-088-622-01	BUTTON
			KP-65WV600 ONLY
27		4-088-585-01	BUTTON
			KP-65WV700 0NLY
28		X-4040-321-1	GRILLE ASSY, SPEAKER
			KP-65WV600 ONLY
28		X-4040-325-1	GRILLE ASSY, SPEAKER
			KP-65WV700 ONLY
29		4-088-588-01	GUIDE, LED
30		4-088-621-01	PANEL, CONTROL
			KP-65WV600 ONLY
30		4-088-584-01	PANEL, CONTROL
			KP-65WV700 0NLY
31		4-088-586-01	GUIDE, LED
32	*	A-1400-748-A	HA MOUNT

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SERVICE MANUAL DA-4X CHASSIS

MODEL NAME	REMOTE COMMANDER	DESTINATION	CHASSIS NO.
KP-57WV600	RM-Y188	US/CND	SCC-P92D-A
KP-57WV700	RM-Y188	US/CND	SCC-P92B-A
KP-65WV600	RM-Y188	US/CND	SCC-P92C-A
KP-65WV700	RM-Y188	US/CND	SCC-P92A-A

CORRECTION- 2

SUBJECT: EXPLODED VIEW COVER PART NUMBERS

Correct the service manual as shown.
File this Correction with the service manual.

☛ : Corrected Item

Section 6: Exploded View
6-1. COVER (KP-57WV600/57WV700 ONLY) (Page 107)

INCORRECT

REF. NO.		PART NO.	DESCRIPTION
15	*	4-088-115-01	BOARD, REAR KP-57WV600 ONLY
15	*	4-091-605-01	BOARD, REAR KP-57WV700 ONLY
NOT LISTED			

CORRECT

	REF. NO.		PART NO.	DESCRIPTION
☛	15	*	4-091-115-01	BOARD, REAR KP-57WV600 ONLY
☛	15	*	4-088-605-01	BOARD, REAR KP-57WV700 ONLY
☛	36	*	4-088-599-01	COVER (57), MIRROR

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SECTION 6: EXPLODED VIEWS

Components not identified by a part number or description are not stocked because they are seldom required for routine service.

The component parts of an assembly are indicated by the reference numbers in the far right column of the parts list and within the dotted lines of the diagram.

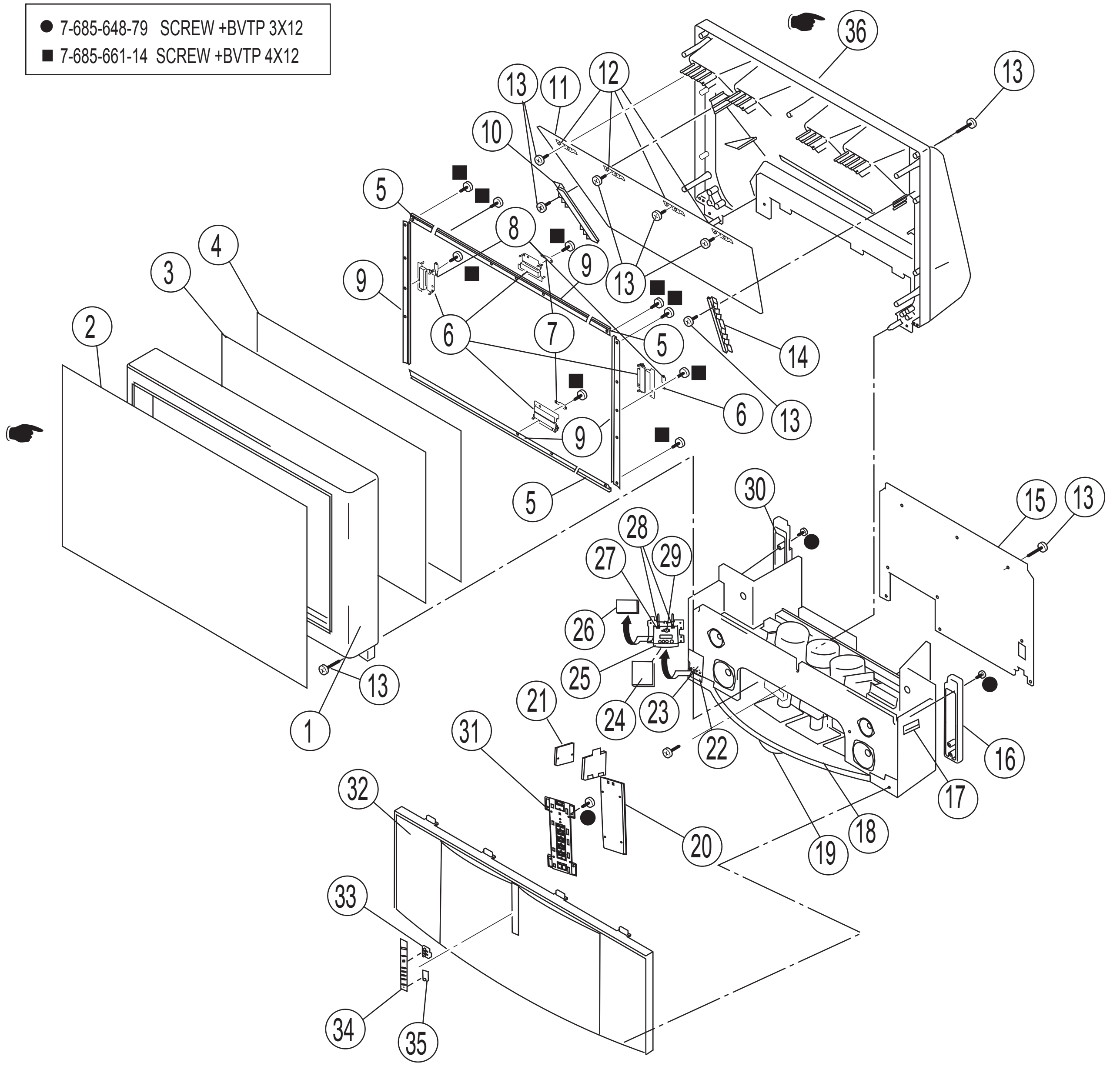
*** Items marked with an asterisk are not stocked since they are seldom required for routine service. Expect some delay when ordering these components.**

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

6-1. COVER (KP-57WV600/57WV700 0NLY)

● 7-685-648-79 SCREW +BVTP 3X12
■ 7-685-661-14 SCREW +BVTP 4X12



REF.NO.		PART NO.	DESCRIPTION
1		X-4040-450-1	BEZNET ASSY KP-57WV600 ONLY
1		X-4040-448-1	BEZNET ASSY KP-57WV700 ONLY
2		A-1603-725-A	CONTRAST SCREEN ASSY KP-57WV600 ONLY
2		A-1603-723-A	CONTRAST SCREEN ASSY KP-57WV700 ONLY
3		4-088-638-11	PLATE, DIFFUSION (WL) KP-57WV600 ONLY
3		4-088-611-11	PLATE, DIFFUSION (WL) KP-57WV700 ONLY
4		4-088-637-11	PLATE, DIFFUSION (WF) KP-57WV600 ONLY
4		4-088-610-11	PLATE, DIFFUSION (WF) KP-57WV700 ONLY
5	*	4-089-180-01	HOLDER, SCREEN SHORT
6	*	A-1400-759-A	SR MOUNT
7		4-088-460-21	CUSHION, SCREEN
8		4-088-460-31	CUSHION, SCREEN
9	*	4-088-461-01	HOLDER, SCREEN
10	*	4-088-600-01	HOLDER (L), MIRROR
11		4-088-598-01	MIRROR
12	*	4-081-501-01	HOLDER, MIRROR
13		4-081-063-01	SCREW,DOME WASHER HEX TAP 4X20
14	*	4-088-601-01	HOLDER (R), MIRROR
☛ 15	*	4-091-115-01	BOARD, REAR KP-57WV600 ONLY
☛ 15	*	4-088-605-01	BOARD, REAR KP-57WV700 ONLY
16	*	4-088-630-01	PANEL R, SIDE KP-57WV600 ONLY
16	*	4-088-607-01	PANEL (R), SIDE KP-57WV700 ONLY
17	*	4-088-541-01	HANDLE
18		4-088-631-01	SKIRT, FRONT KP-57WV600 ONLY
18		4-088-603-01	SKIRT, FRONT KP-57WV700 ONLY
19		4-075-020-01	FOOT, PLASTIC
20	*	A-1400-748-A	HA MOUNT
21	*	A-1300-323-A	HM COMPLETE PC BOARD
22		4-088-572-01	LABEL, INPUT TERMINAL
23		4-088-569-01	BRACKET, INPUT TERMINAL
24		4-088-571-01	PLATE, INPUT TERMINAL
25		3-973-975-41	DAMPER, OIL
26	*	A-1400-747-A	HB MOUNT
27		4-088-570-01	COVER, INPUT TERMINAL
28		4-088-573-01	SPRING
29		4-047-464-01	CATCHER, PUSH
30	*	4-088-629-01	PANEL L, SIDE KP-57WV600 ONLY
30	*	4-088-606-01	PANEL (L), SIDE KP-57WV700 ONLY
31		4-088-622-01	BUTTON KP-57WV600 ONLY
31		4-088-585-01	BUTTON KP-57WV700 0NLY
32		X-4040-323-1	GRILLE ASSY, SPEAKER KP-57WV600 ONLY
32		X-4040-326-1	GRILLE ASSY, SPEAKER KP-57WV700 ONLY
33		4-088-588-01	GUIDE, LED
34		4-088-621-01	PANEL, CONTROL KP-57WV600 ONLY
34		4-088-584-01	PANEL, CONTROL KP-57WV700 0NLY
35		4-088-586-01	GUIDE, LED
☛ 36	*	4-088-599-01	COVER (57), MIRROR

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Service Promotion Department

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SERVICE MANUAL DA-4X CHASSIS

MODEL NAME	REMOTE COMMANDER	DESTINATION	CHASSIS NO.
KP-57WV600	RM-Y188	US/CND	SCC-P92D-A
KP-57WV700	RM-Y188	US/CND	SCC-P92B-A
KP-65WV600	RM-Y188	US/CND	SCC-P92C-A
KP-65WV700	RM-Y188	US/CND	SCC-P92A-A

SUPPLEMENT - 1

SUBJECT: REPLACED BOARDS, UPDATED PART NUMBERS

Correct the service manual as shown.
File this Supplement with the service manual.

☛ : Corrected Item

Section 5: Diagrams
- Replaced MS1 Board with BM1C Board (Page 85-87)
- Updated AD Board Schematic (Page 91-92)
- Updated D Board Schematic and PWB (Page 94-96)

Section 6: Exploded View
- 6-1. COVER (KP-57WV600/57WV700 ONLY) (Page 107)
- 6-3. CHASSIS (Page 109)
- 6-4. PICTURE TUBE (Page 110)

Section 7: Parts List
- Replaced MS1 Board with BM1C Board (Page 134)
- Updated AD Board (Page 141)
- Updated D Board (Page 145)
- Updated Accessories and Packaging (Page 163)

COLOR REAR VIDEO PROJECTOR

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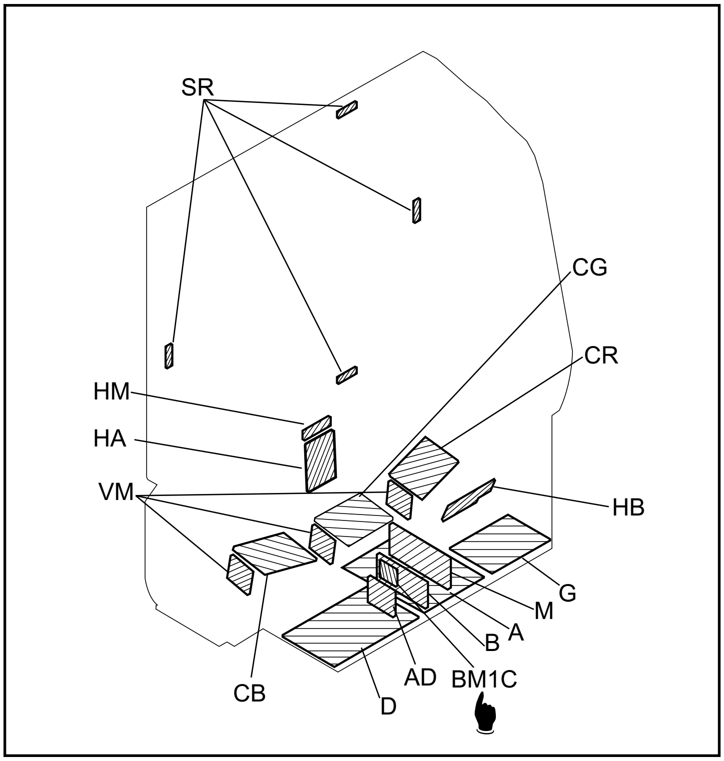
SECTION 5: DIAGRAMS

5-1. CIRCUIT BOARDS LOCATION



5-2. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS INFORMATION

All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.

All electrolytics are in 50V unless otherwise specified.

All resistors are in ohms. K=1000, M=1000k

Indication of resistance, which does not have one for rating electrical power, is as follows: Pitch : 5mm
Rating electrical power : $^{1}/_{4}$ W

$^{1}/_{4}$ W in resistance, $^{1}/_{10}$ W and $^{1}/_{8}$ W in chip resistance.

▭ : nonflammable resistor.

▭ : fusible resistor.

Δ : internal component.

▭ : panel designation and adjustment for repair.

⊥ : earth ground

⏚ : earth-chassis

All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

Readings are taken with a NTSC color-bar signal input.

Readings are taken with a 10M digital multimeter.

Voltages are DC with respect to ground unless otherwise noted.

Voltage variations may be noted due to normal production tolerances.

All voltages are in V.

S : Measurement impossibillity.

▬ : B+ line

▬ ▬ : B-line. (Actual measured value may be different).

⇨ : signal path. (RF)

Circled numbers are waveform references.

The components identified by ⧓ in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be necessary, replace only with the value originally used.

When replacing components identified by ◪, make the necessary adjustments as indicated. If the results do not meet the specified value, change the component identified by ⧓ and repeat the adjustment until the specified value is achieved.

(Refer to adjustments in Sections 3-1 and 3-2.)

When replacing the parts listed in the table below, it is important to perform the related adjustments.

Part Replaced (◪)	**Adjustment (⧓)**
A BOARD: HV Block, T8005 (FBT), T8004 (LOT), R8129, D8038, R8128, C8129, R8223, R8102, R8230, R8055, R8153, C8083, R8139, C8079, D8051, D8013, R8140, D8043, R8163, C8090, D8015. R8142, R8131, Q8021, IC8006, D Board	**HV REGULATOR** VR8001
A BOARD: HV Block, T8005 (FBT), T8004 (LOT), C8123, C8124, Q8043, Q8035, C8104, R8171, D8036, R8043, R8035, C8088, C8086, R8159, D8022, C8054, R8166, C8100, IC8008, D8019, D8020, R8201, C8118, D8028, R8196, FB8001, D Board	**HV HOLD DOWN** VR8002

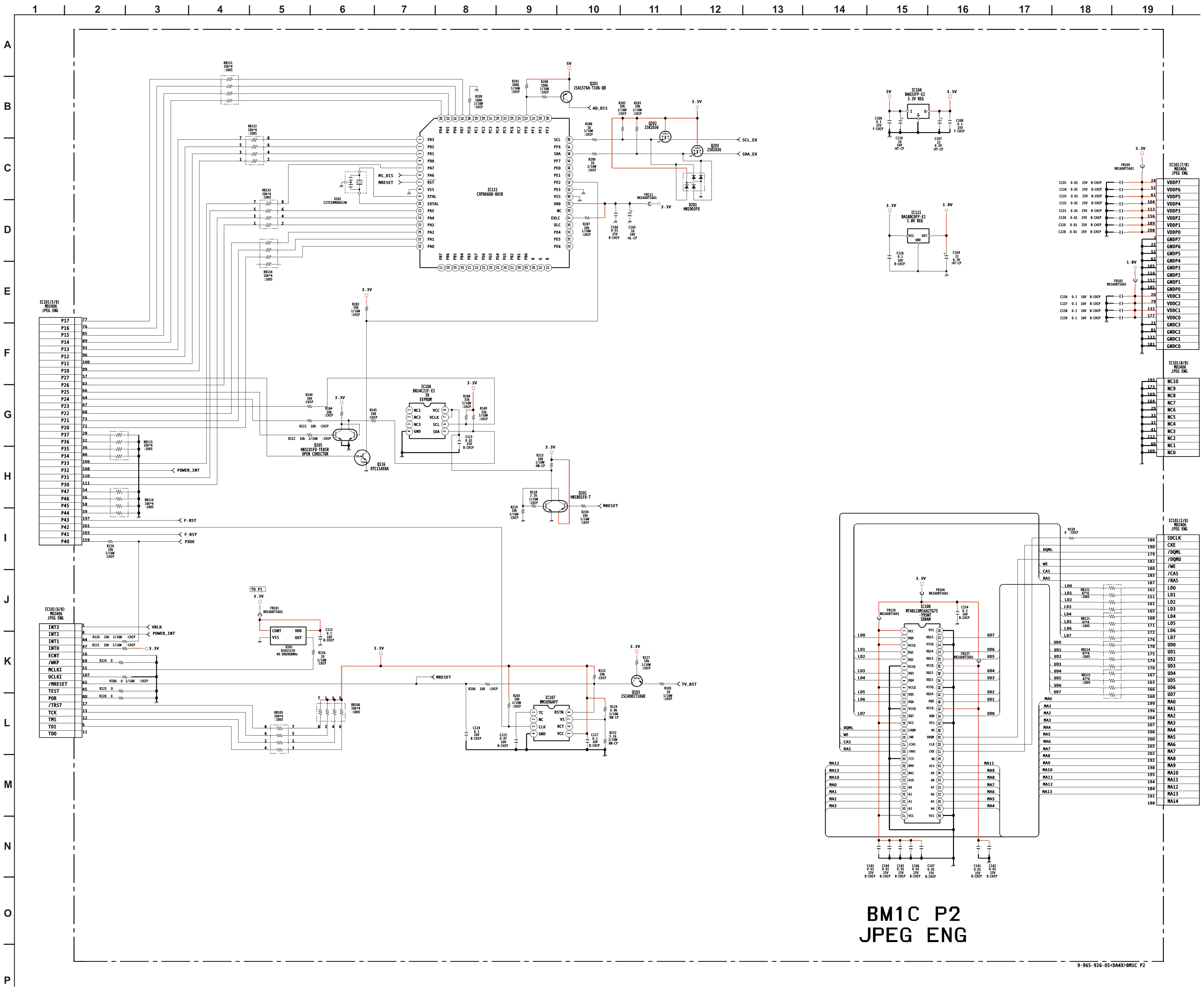
BM1C BOARD SCHEMATIC DIAGRAM (1 OF 2)

The BM1C board is not field repairable. If service is required, use the following part number to order a complete replacement board.

A-1300-690-A BM1C Board, Complete

BM1C P1
MEMORY STICK
DECODER BOARD
IC101(4/8) MD2406 JPEG ENG
IC101(3/8) MD2406 JPEG ENG
IC101(1/8) MD2406 JPEG ENG
IC102 SST39VF800A70E-1 FLASH ROM
Q110 DTC114EKA
D101 HN1D03FU
D102 HN1D03FU
CN104 60P WHT
TO B BOARD CN3601
TO P2
F-RST
F-BSY
3.3V
5V
YUV
VBLK
PXOE
MS_DIS
INS_BC
MS_SCLK
MS_BS
MS_SDIR
MS_SDIO
AD_DIS
SCL_EX
MS_SDIN
SDA_EX
MS_SDI
TV_RST
POWER_INT
MS_SCLKN
MS_SDION
MS_BSN
MS_SDIRN
9-965-926-05<DA4X>BM1C P1

BM1C BOARD SCHEMATIC DIAGRAM (2 OF 2)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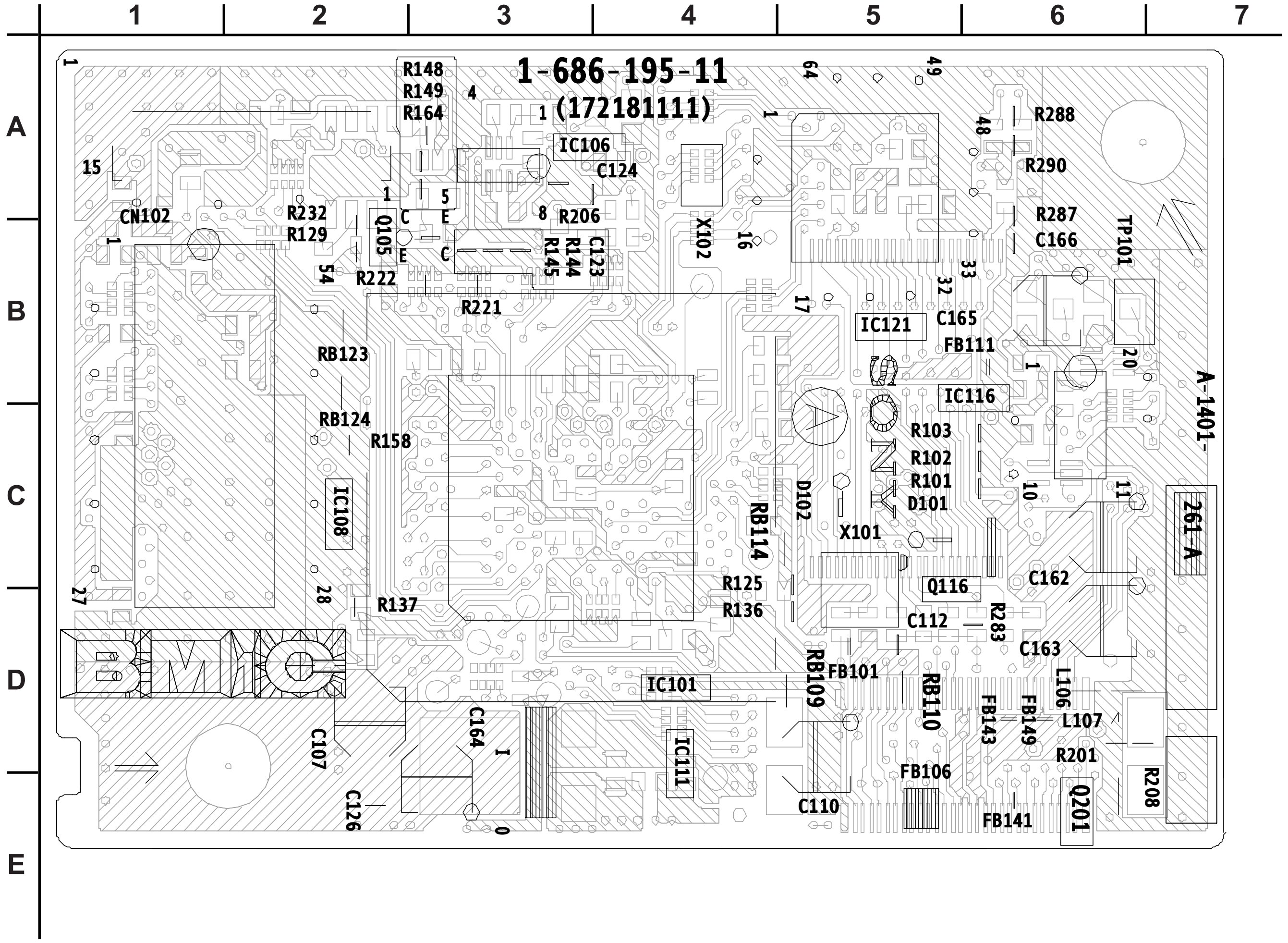
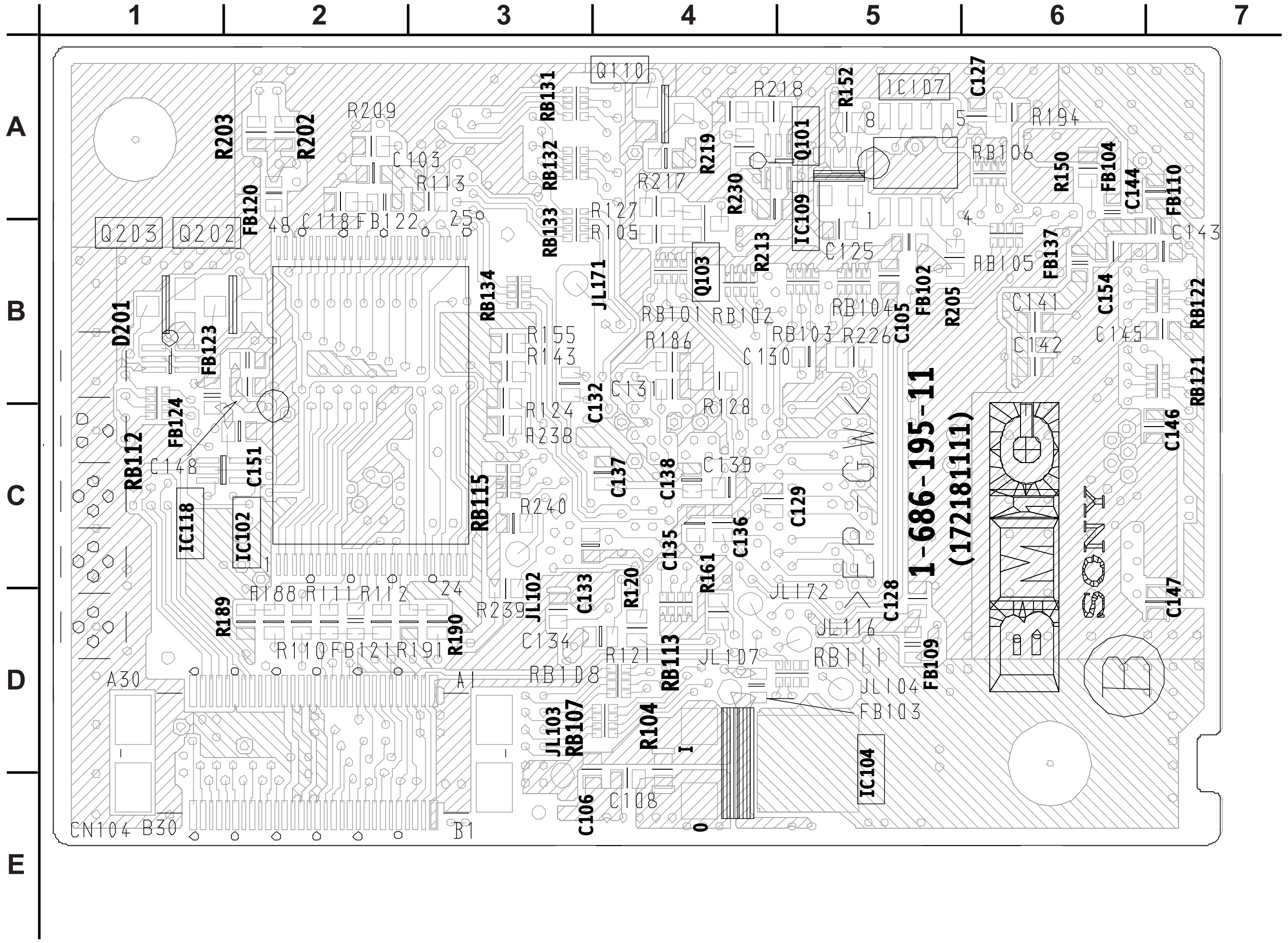
11
12
13
14
15
16
17
18
19
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
IC121 CXP86608-001R
IC106 BR24C21F-E2 1K EEPROM
IC104 BA033FP-E2 3.3V REG
IC111 BA18BC0FP-E2 1.8V REG
IC108 SDRAM
IC107 MM1096AFF
IC101(5/8) MD2406 JPEG ENG
IC101(6/8) MD2406 JPEG ENG
IC101(7/8) MD2406 JPEG ENG
IC101(8/8) MD2406 JPEG ENG
IC101(2/8) MD2406 JPEG ENG
Q105 OPEN CORECTOR
POWER_INT
F-RST
F-BSY
PXOE
VBLK
MRESET
AD_DIS
SCL_EX
SDA_EX
TV_RST
TO P1
BM1C P2
JPEG ENG
9-965-926-05<DA4X>BM1C P2

BM1C [MEMORY STICK, DECODER BOARD, JPEG ENG]

[COMPONENT SIDE]

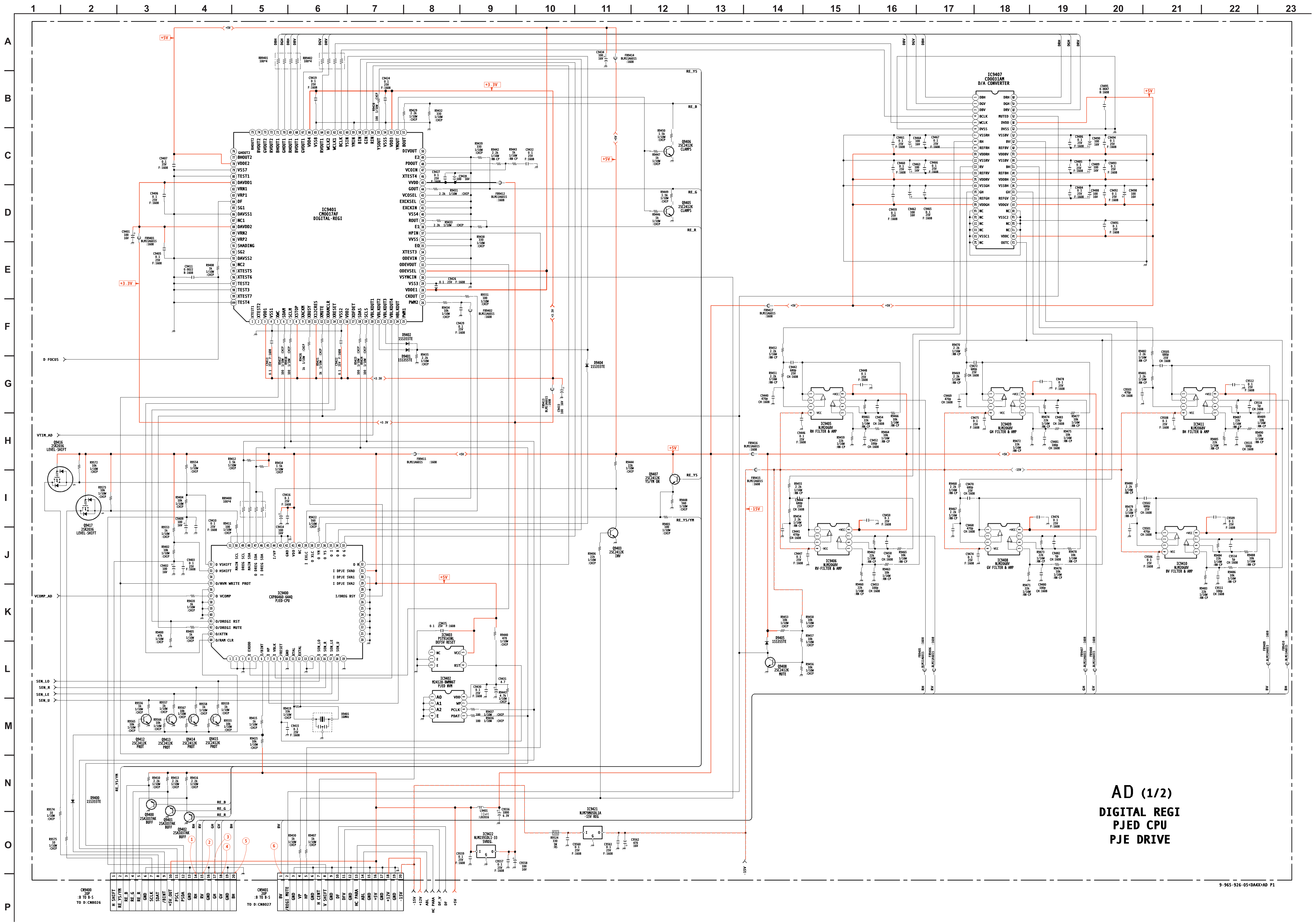

1
2
3
4
5
6
7
A
B
C
D
E
1-686-195-11
(172181111)
R148
R149
R164
IC106
C124
CN102
R232
R129
Q105
R222
R206
R144
R145
C123
R221
X102
R288
R290
R287
C166
TP101
IC121
C165
FB111
IC116
R103
R102
R101
D101
D102
X101
RB114
RB123
RB124
R158
IC108
R137
R125
R136
Q116
R283
C112
C162
C163
261-A
A-1401-
IC101
RB109
FB101
RB110
FB143
FB149
L106
L107
R201
R208
Q201
C164
IC111
C110
FB106
FB141
C107
C126
SONY
BM1C

[CONDUCTOR SIDE]

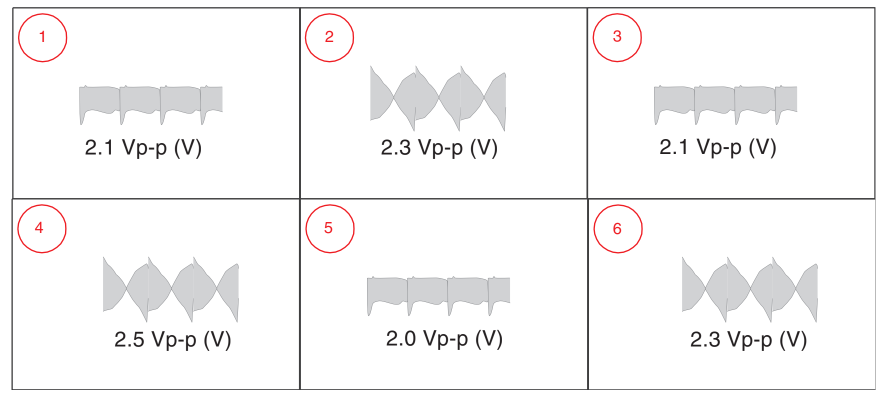

1
2
3
4
5
6
7
A
B
C
D
E
Q110
R203
R202
R209
C103
R113
RB131
RB132
RB133
R218
R152
IC107
C127
R194
RB106
R150
FB104
C144
FB110
Q203
Q202
FB120
C118
FB122
R127
R105
R217
R219
R230
Q101
IC109
C125
C143
RB105
FB137
RB134
JL171
Q103
R213
RB101
RB102
RB104
C105
FB102
R205
C141
C142
C154
C145
RB122
D201
FB123
R155
R143
R186
RB103
R226
C130
RB121
FB124
RB112
C148
C151
C132
C131
R124
R238
R128
C146
IC118
IC102
RB115
R240
C137
C138
C139
C129
1-686-195-11
(172181111)
SONY
BM1C
R188
R111
R112
R239
JL102
C133
R120
C135
R161
C136
JL172
C128
C147
R189
R110
FB121
R191
R190
C134
RB108
R121
RB113
JL107
JL116
RB111
FB109
JL104
FB103
A30
A1
JL103
RB107
R104
IC104
CN104
B30
B1
C106
C108

AD BOARD SCHEMATIC DIAGRAM (1 OF 2)

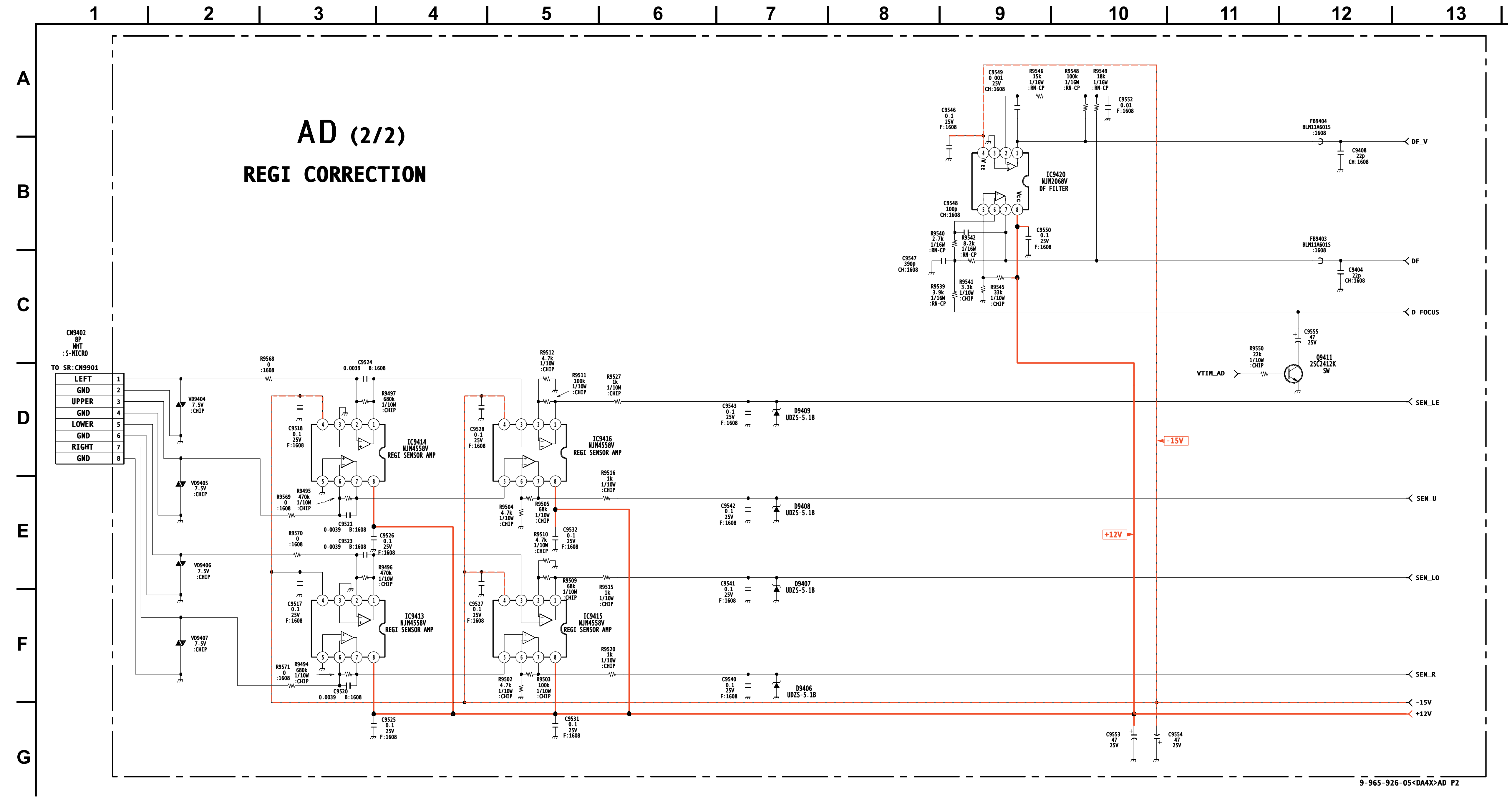
The AD board is not field repairable. If service is required, use the following part number to order a complete replacement board.
A-1300-887-A AD Board, Complete


IC9401
CM0017AF
DIGITAL-REGI
IC9407
CDD031AM
D/A CONVERTER
IC9400
CXP86460-644Q
PJED-CPU
IC9403
PST9426L
DEF5V RESET
IC9402
M24128-BWMN6T
PJED 6VM
IC9421
NJM79M05DL1A
-5V REG
IC9422
NJM2391DL1-33
5VREG
IC9405
NJM2068V
RH FILTER & AMP
IC9409
NJM2068V
GH FILTER & AMP
IC9411
NJM2068V
BH FILTER & AMP
IC9406
NJM2068V
RV FILTER & AMP
IC9408
NJM2068V
GV FILTER & AMP
IC9410
NJM2068V
BV FILTER & AMP
Q9416
2SK2036
LEVEL-SHIFT
Q9417
2SK2036
LEVEL-SHIFT
CN9400
20P
:B TO B-S
TO D:CN8026
CN9401
20P
:B TO B-S
TO D:CN8027
D FOCUS
VTIM_AD
VCOMP_AD
SEN_LO
SEN_R
SEN_LE
SEN_U
AD (1/2)
DIGITAL REGI
PJED CPU
PJE DRIVE
9-965-926-05<DA4X>AD P1

AD BOARD WAVEFORMS



AD BOARD SCHEMATIC DIAGRAM (2 OF 2)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A
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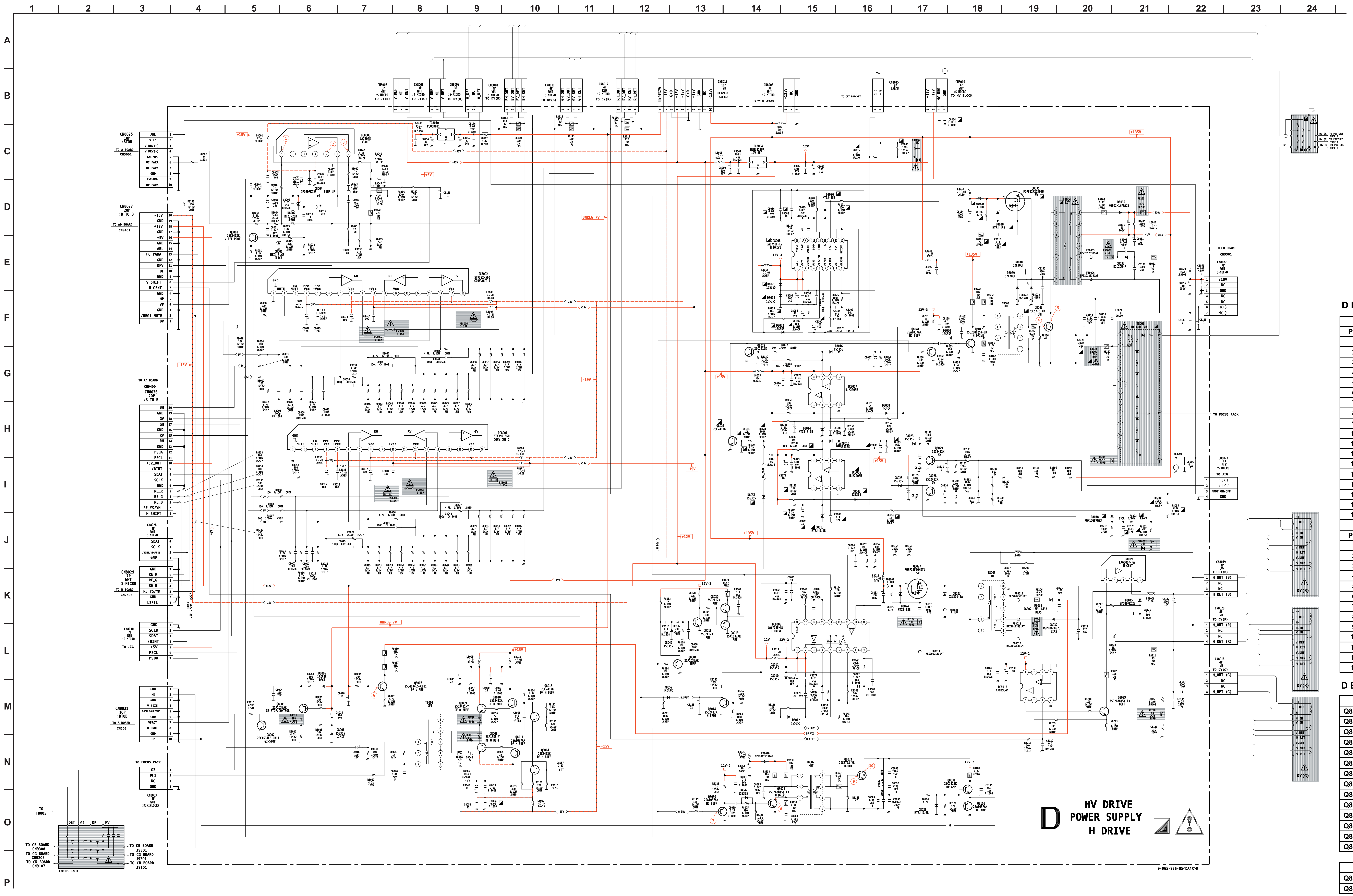
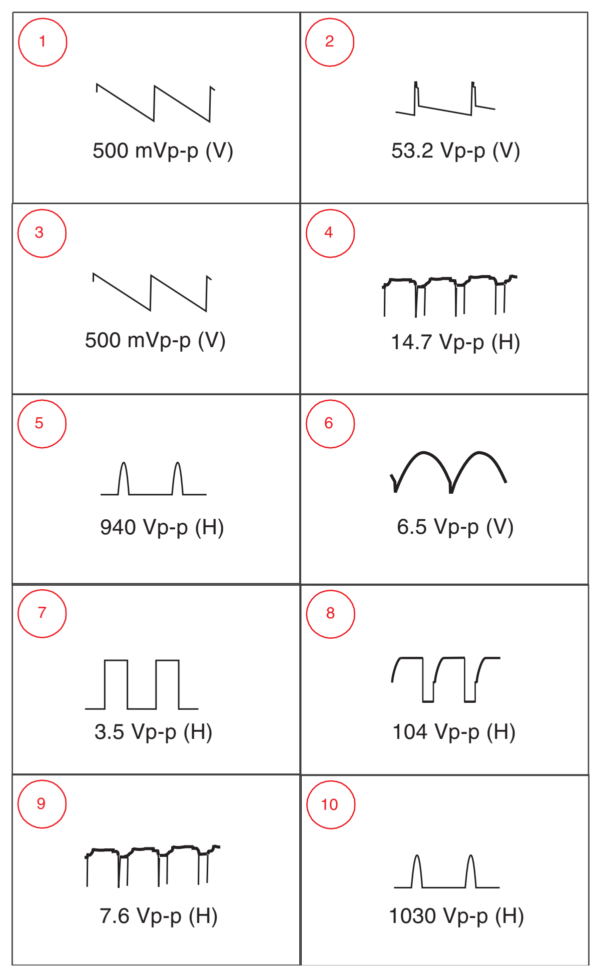
G
AD (2/2)
REGI CORRECTION
CN9402
8P
WHT
:S-MICRO
TO SR:CN9901
LEFT 1
GND 2
UPPER 3
GND 4
LOWER 5
GND 6
RIGHT 7
GND 8
VD9404 7.5V :CHIP
VD9405 7.5V :CHIP
VD9406 7.5V :CHIP
VD9407 7.5V :CHIP
R9568 0 :1608
C9524 0.0039 B:1608
R9497 680k 1/10W :CHIP
C9518 0.1 25V F:1608
IC9414 NJM4558V REGI SENSOR AMP
R9569 0 :1608
R9495 470k 1/10W :CHIP
C9521 0.0039 B:1608
R9570 0 :1608
C9523 0.0039 B:1608
C9526 0.1 25V F:1608
R9496 470k 1/10W :CHIP
C9517 0.1 25V F:1608
IC9413 NJM4558V REGI SENSOR AMP
R9571 0 :1608
R9494 680k 1/10W :CHIP
C9520 0.0039 B:1608
C9525 0.1 25V F:1608
R9512 4.7k 1/10W :CHIP
R9511 100k 1/10W :CHIP
R9527 1k 1/10W :CHIP
C9528 0.1 25V F:1608
IC9416 NJM4558V REGI SENSOR AMP
R9516 1k 1/10W :CHIP
R9504 4.7k 1/10W :CHIP
R9505 68k 1/10W :CHIP
R9510 4.7k 1/10W :CHIP
C9532 0.1 25V F:1608
R9509 68k 1/10W :CHIP
R9515 1k 1/10W :CHIP
C9527 0.1 25V F:1608
IC9415 NJM4558V REGI SENSOR AMP
R9520 1k 1/10W :CHIP
R9502 4.7k 1/10W :CHIP
R9503 100k 1/10W :CHIP
C9531 0.1 25V F:1608
C9543 0.1 25V F:1608
D9409 UDZS-5.1B
C9542 0.1 25V F:1608
D9408 UDZS-5.1B
C9541 0.1 25V F:1608
D9407 UDZS-5.1B
C9540 0.1 25V F:1608
D9406 UDZS-5.1B
C9549 0.001 25V CH:1608
R9546 15k 1/16W :RN-CP
R9548 100k 1/16W :RN-CP
R9549 18k 1/16W :RN-CP
C9552 0.01 F:1608
C9546 0.1 25V F:1608
VEE
Vcc
IC9420 NJM2068V DF FILTER
C9548 100p CH:1608
R9540 2.7k 1/16W :RN-CP
R9542 8.2k 1/16W :RN-CP
C9550 0.1 25V F:1608
C9547 390p CH:1608
R9539 3.9k 1/16W :RN-CP
R9541 3.3k 1/10W :CHIP
R9545 33k 1/10W :CHIP
FB9404 BLM11A601S :1608
C9408 22p CH:1608
DF_V
FB9403 BLM11A601S :1608
C9404 22p CH:1608
DF
D FOCUS
C9555 47 25V
R9550 22k 1/10W :CHIP
Q9411 2SC2412K SW
VTIM_AD
SEN_LE
SEN_U
SEN_LO
SEN_R
-15V
+12V
C9553 47 25V
C9554 47 25V
9-965-926-05<DA4X>AD P2

D BOARD SCHEMATIC DIAGRAM



D BOARD WAVEFORMS



D BOARD IC VOLTAGE LIST

IC8001		14	0.3	15	GND	10	7.4
PIN	**VOLT**	15	0	16	3.2	11	7.4
1	GND	16	0	17	2.6	12	7.4
2	4.3	17	-22	18	9.1	13	GND
3	N/C	18	0.1	**IC8006**		14	7.1
4	-22.0	**IC8003**		**PIN**	**VOLT**	15	GND
5	22.0	**PIN**	**VOLT**	1	0.1	16	3.2
6	-0.3	1	1.3	2	5.0	17	2.6
7	-0.3	2	15.0	3	4.5	18	9.1
8	-22.0	3	-13.1	4	GND	**IC8009**	
9	-0.5	4	-15.0	5	0.0	**PIN**	**VOLT**
10	22.0	5	0.4	6	5.0	1	98.2
11	0.1	6	15.0	7	0.1	2	98.2
12	-22.0	7	1.3	8	15.0	3	94.0
13	0.0	**IC8004**		**IC8007**		4	97.8
14	0.0	**PIN**	**VOLT**	**PIN**	**VOLT**	5	101.1
15	0.0	I	15.0	1	0.1	**IC8010**	
16	0.0	O	12.0	2	5.0	**PIN**	**VOLT**
17	-22.0	G	GND	3	4.0	I	7.0
18	0.1	**IC8005**		4	GND	O	5.0
IC8002		**PIN**	**VOLT**	5	0.0	G	GND
PIN	**VOLT**	1	12.0	6	5.0	**IC8012**	
1	GND	2	12.0	7	0.1	**PIN**	**VOLT**
2	4.3	3	5.8	8	15.0	1	2.7
3	N/C	4	GND	**IC8008**		2	2.1
4	-22.0	5	7.9	**PIN**	**VOLT**	3	2.1
5	22.0	6	3.8	1	12.0	4	GND
6	-0.1	7	3.8	2	12.0	5	GND
7	-0.1	8	N/C	3	6.0	6	0.0
8	-22.0	9	3.8	4	GND	7	0.0
9	0.0	10	3.6	5	8.0	8	12.0
10	22.0	11	3.6	6	7.4		
11	0.5	12	3.6	7	7.4		
12	-22.0	13	GND	8	N/C		
13	0.3	14	7.1	9	3.3		

All voltages are in V.

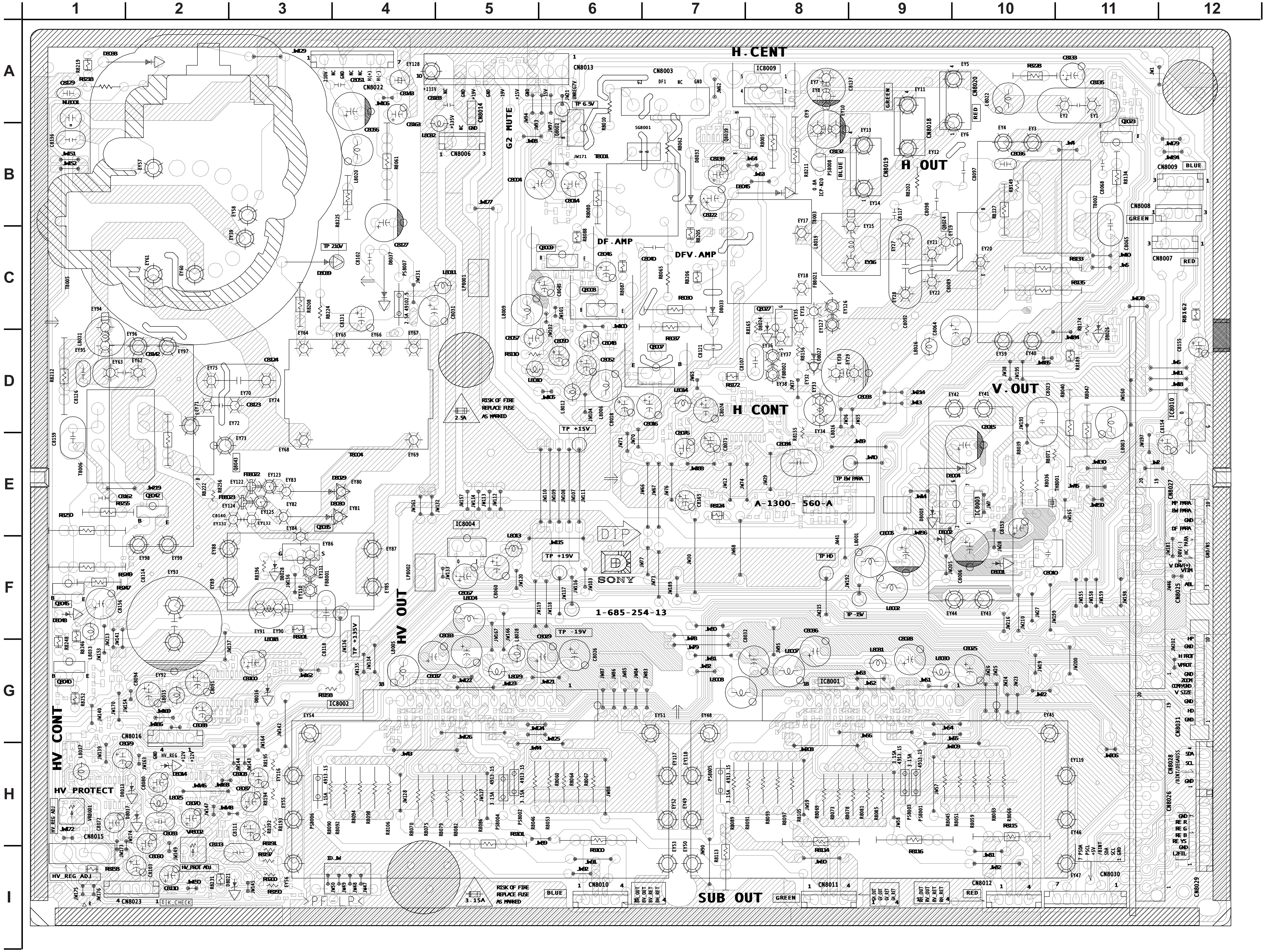
D BOARD TRANSISTOR VOLTAGE LIST

	B	C	E		B	C	E
Q8001	-0.4	15.0	0.1	**Q8021**	0.0	8.9	GND
Q8002	0	13.0	GND	**Q8022**	0.0	8.9	GND
Q8003	14.6	0.0	14.6	**Q8023**	-0.5	68.0	GND
Q8004	3.4	GND	4.0	**Q8024**	0.1	242.0	GND
Q8007	5.8	204.0	5.2	**Q8028**	0.5	0.0	GND
Q8008	2.8	-22.0	3.3	**Q8029**	0.5	0.0	GND
Q8009	4.0	22.0	3.4	**Q8030**	3.4	GND	4.0
Q8010	4.5	22.0	4.0	**Q8031**	0.2	12.0	0.6
Q8011	2.3	-22.0	2.7	**Q8039**	2.7	76.7	2.1
Q8014	-20.0	2.3	-20.6	**Q8041**	3.4	GND	8.9
Q8015	2.9	4.5	2.3	**Q8042**	9.6	29.8	GND
Q8016	-0.3	7.4	GND	**Q8043**	8.9	192.0	0.1
Q8019	7.4	GND	7.2	**Q8044**	0.6	0.0	GND
Q8020	7.4	12.0	7.2	**Q8101**	0.2	GND	0.6

	D	G	S
Q8027	112.3	131.1	135.0
Q8035	115.6	130.9	135.9

All voltages are in V.

D [HV DRIVE, POWER SUPPLY, H DRIVE] [COMPONENT SIDE]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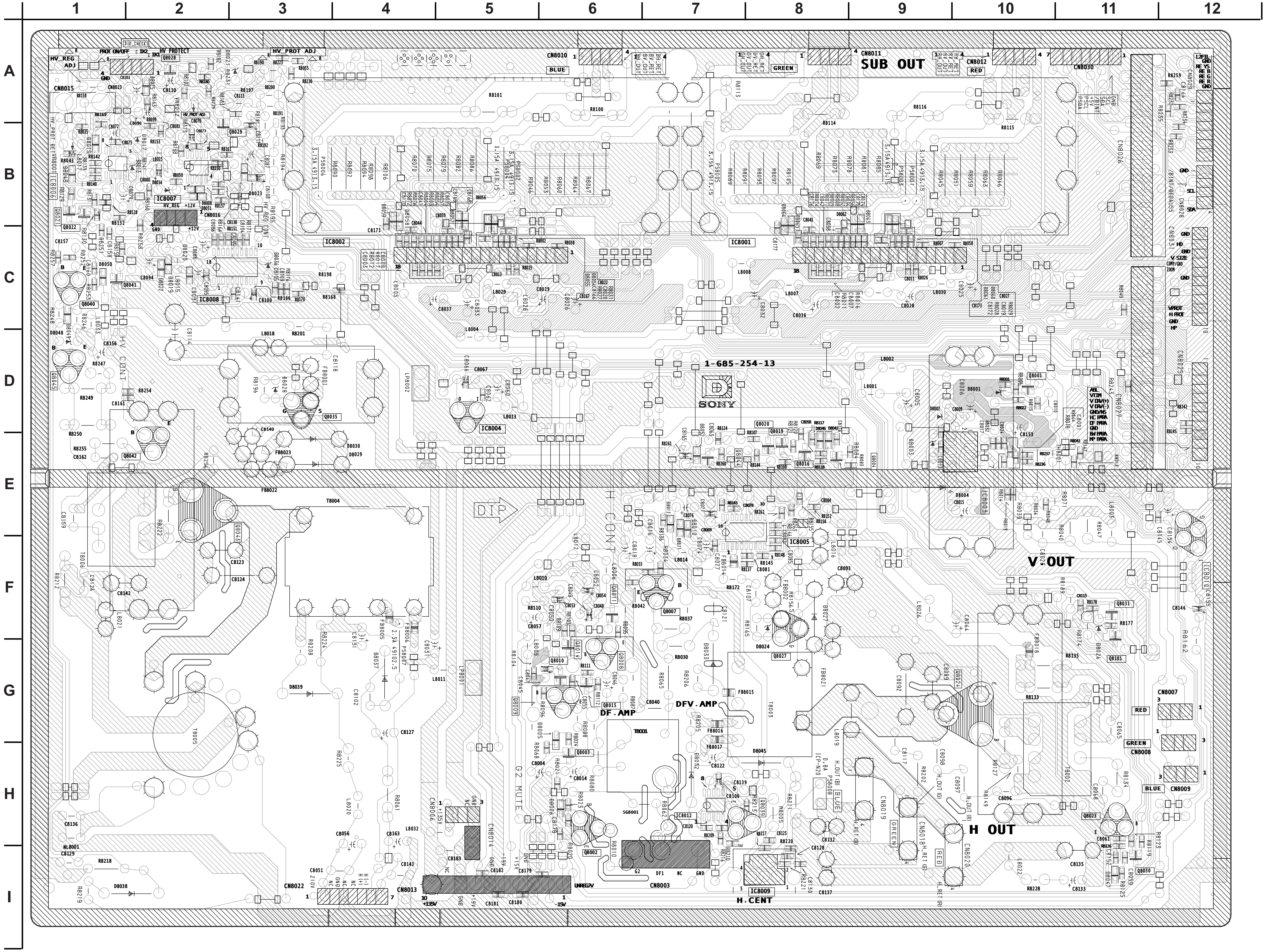
H
I
H.CENT
G2 MUTE
H OUT
DF.AMP
DFV.AMP
V.OUT
H CONT
HV OUT
HV CONT
HV PROTECT
SUB OUT
A-1300-560-A
1-685-254-13
RISK OF FIRE REPLACE FUSE AS MARKED
SONY
DIP
TP 210V
TP +135V
TP +15V
TP +19V
TP -19V
TP 6.5V
TP HD
BLUE
GREEN
RED
HV_REG ADJ
CN8003
CN8006
CN8013
CN8014
CN8015
CN8016
CN8018
CN8019
CN8020
CN8022
CN8023
CN8025
CN8026
CN8027
CN8028
CN8029
CN8030
CN8031
CN8007
CN8008
CN8009
CN8010
CN8011
CN8012
IC8001
IC8002
IC8003
IC8004
IC8009
IC8010
T8001
T8004
T8005
T8006

D [HV DRIVE, POWER SUPPLY, H DRIVE] [CONDUCTOR SIDE]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HV_REG ADJ
HV PROTECT
HV_PROT ADJ
CN8010
BLUE
GREEN
CN8011
SUB OUT
CN8012
RED
CN8030
IC8001
IC8002
IC8007
IC8008
IC8004
IC8005
IC8003
IC8010
IC8012
IC8009
1-685-254-13
SONY
HV CONT
T8004
T8005
DIP
V OUT
DF AMP
DFV AMP
G2 MUTE
H OUT
H.CENT
CN8003
CN8013
CN8022
CN8007
CN8008
CN8009
T8001
T8002
T8003

D BOARD LOCATOR LIST

IC		DIODE	
IC8001	C-7	D8001	D-10
IC8002	C-3	D8002	D-9
IC8003	E-10	D8003	D-9
IC8004	D-5	D8004	E-9
IC8005	F-8	D8005	H-5
IC8006	B-1	D8006	H-6
IC8007	B-2	D8008	B-2
IC8008	C-2	D8010	E-7
IC8009	I-8	D8011	E-7
IC8010	F-12	D8012	E-7
IC8012	H-7	D8013	B-2
TRANSISTOR		D8014	B-2
Q8001	D-10	D8015	B-1
Q8002	H-6	D8016	B-3
Q8003	G-6	D8019	C-2
Q8004	E-9	D8020	C-2
Q8007	F-7	D8022	C-2
Q8008	G-6	D8023	B-3
Q8009	G-5	D8024	G-7
Q8010	G-6	D8025	A-2
Q8011	F-6	D8026	G-11
Q8014	G-6	D8027	F-8
Q8015	G-6	D8028	D-3
Q8016	E-8	D8029	E-3
Q8019	D-8	D8030	E-3
Q8020	D-8	D8032	H-7
Q8021	B-1	D8033	G-7
Q8022	B-1	D8036	C-3
Q8023	H-11	D8037	G-4
Q8024	G-10	D8038	I-2
Q8027	F-8	D8039	G-3
Q8028	A-2	D8042	D-8
Q8029	B-3	D8043	B-1
Q8030	I-11	D8045	H-8
Q8031	F-11	D8047	I-11
Q8035	D-3	D8050	C-1
Q8039	H-8	D8051	B-2
Q8041	C-2	D8052	D-7
Q8042	E-2		
Q8043	E-3		
Q8044	E-8		
Q8101	G-11		

SECTION 6: EXPLODED VIEWS

Components not identified by a part number or description are not stocked because they are seldom required for routine service.

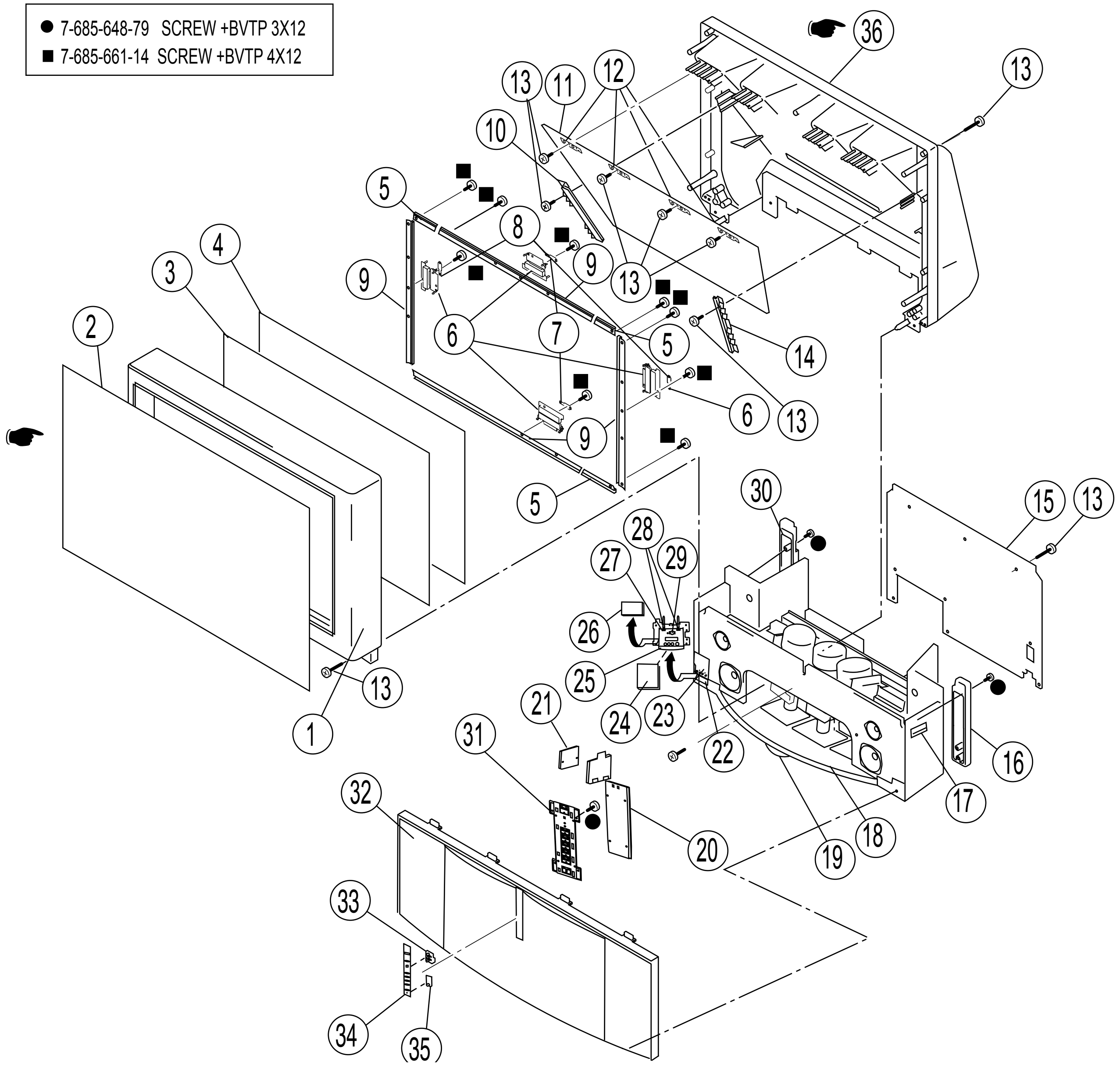
The component parts of an assembly are indicated by the reference numbers in the far right column of the parts list and within the dotted lines of the diagram.

*** Items marked with an asterisk are not stocked since they are seldom required for routine service. Expect some delay when ordering these components.**

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

6-1. COVER (KP-57WV600/57WV700 0NLY)



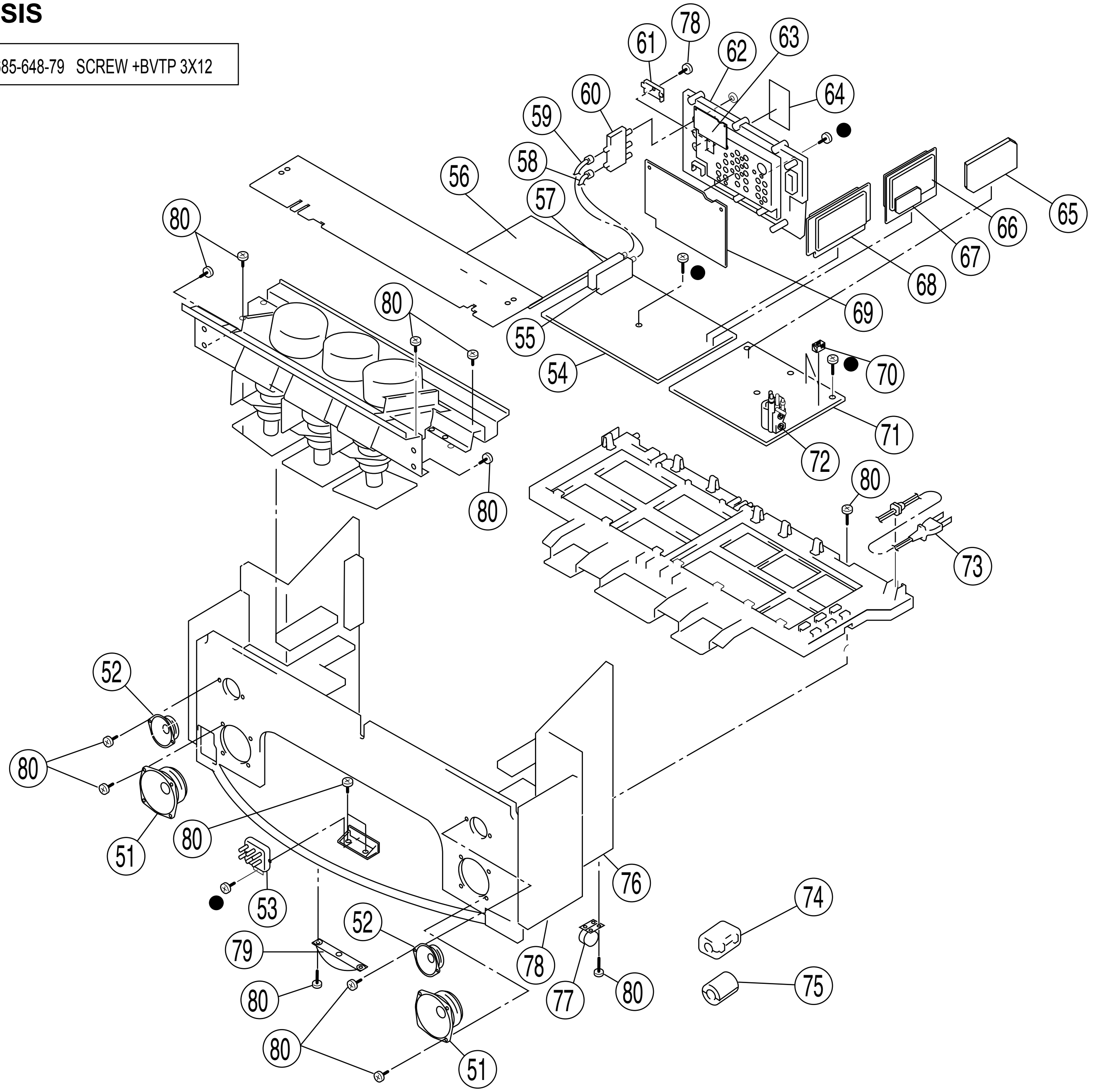
REF.NO.	PART NO.	DESCRIPTION
☛ 1	X-4040-450-3	BEZNET ASSY KP-57WV600 ONLY
☛ 1	X-4040-448-3	BEZNET ASSY KP-57WV700 ONLY
2	A-1603-725-A	CONTRAST SCREEN ASSY KP-57WV600 ONLY
2	A-1603-723-A	CONTRAST SCREEN ASSY KP-57WV700 ONLY
3	4-088-638-11	PLATE, DIFFUSION (WL) KP-57WV600 ONLY
3	4-088-611-11	PLATE, DIFFUSION (WL) KP-57WV700 ONLY
4	4-088-637-11	PLATE, DIFFUSION (WF) KP-57WV600 ONLY
4	4-088-610-11	PLATE, DIFFUSION (WF) KP-57WV700 ONLY
5	* 4-089-180-01	HOLDER, SCREEN SHORT
6	* A-1400-759-A	SR MOUNT
7	4-088-460-21	CUSHION, SCREEN
8	4-088-460-31	CUSHION, SCREEN
9	* 4-088-461-01	HOLDER, SCREEN
10	* 4-088-600-01	HOLDER (L), MIRROR
11	4-088-598-01	MIRROR
12	* 4-081-501-01	HOLDER, MIRROR
13	4-081-063-01	SCREW,DOME WASHER HEX TAP 4X20
14	* 4-088-601-01	HOLDER (R), MIRROR
☛ 15	* 4-091-115-01	BOARD, REAR KP-57WV600 ONLY
☛ 15	* 4-088-605-01	BOARD, REAR KP-57WV700 ONLY
16	* 4-088-630-01	PANEL R, SIDE KP-57WV600 ONLY
16	* 4-088-607-01	PANEL (R), SIDE KP-57WV700 ONLY
17	* 4-088-541-01	HANDLE
18	4-088-631-01	SKIRT, FRONT KP-57WV600 ONLY
18	4-088-603-01	SKIRT, FRONT KP-57WV700 ONLY
19	4-075-020-01	FOOT, PLASTIC
20	* A-1400-748-A	HA MOUNT
21	* A-1300-323-A	HM COMPLETE PC BOARD
22	4-088-572-01	LABEL, INPUT TERMINAL
23	4-088-569-01	BRACKET, INPUT TERMINAL
24	4-088-571-01	PLATE, INPUT TERMINAL
25	3-973-975-41	DAMPER, OIL
26	* A-1400-747-A	HB MOUNT
27	4-088-570-01	COVER, INPUT TERMINAL
28	4-088-573-01	SPRING
29	4-047-464-01	CATCHER, PUSH
30	* 4-088-629-01	PANEL L, SIDE KP-57WV600 ONLY
30	* 4-088-606-01	PANEL (L), SIDE KP-57WV700 ONLY
31	4-088-622-01	BUTTON KP-57WV600 ONLY
31	4-088-585-01	BUTTON KP-57WV700 0NLY
32	X-4040-323-1	GRILLE ASSY, SPEAKER KP-57WV600 ONLY
32	X-4040-326-2	GRILLE (57) ASSY, SPEAKER KP-57WV700 ONLY
33	4-088-588-01	GUIDE, LED
34	4-088-621-01	PANEL, CONTROL KP-57WV600 ONLY
34	4-088-584-01	PANEL, CONTROL KP-57WV700 0NLY
35	4-088-586-01	GUIDE, LED
☛ 36	4-088-599-01	COVER (57), MIRROR

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

6-3. CHASSIS

● 7-685-648-79 SCREW +BVTP 3X12



	REF.NO.		PART NO.	DESCRIPTION
	51		1-825-191-11	LOUDSPEAKER (13 CM)
	52		1-825-200-11	LOUDSPEAKER (6.6 CM)
⚠	53		1-223-925-81	RESISTOR ASSY (HIGH-VOLTAGE)
	54	*	A-1300-406-A	A BOARD, COMPLETE
	55		8-598-593-50	TUNER, FSS BTF-WA421
	56	*	A-1300-410-A	G BOARD, COMPLETE
	57		8-598-594-30	TUNER, FSS BTF-FA421
	58	*	1-555-400-00	CABLE, PIN
	59	*	1-557-056-31	CABLE, P-P
⚠	60		1-771-787-13	SWITCH, RF ANTENNA
	61		4-069-675-01	CAP, TERMINAL BOARD
	62		4-088-590-01	BOARD, TERMINAL
	63	*	A-1300-324-A	UD BOARD, COMPLETE
	64		4-088-591-01	LABEL, TERMINAL
☛	65	*	A-1300-887-A	AD BOARD, COMPLETE
	66	*	A-1300-407-A	B BOARD, COMPLETE
☛	67	*	A-1300-690-A	BM1C BOARD, COMPLETE
	68	*	A-1300-646-A	M BOARD, COMPLETE
	69	*	A-1300-321-A	U BOARD, COMPLETE

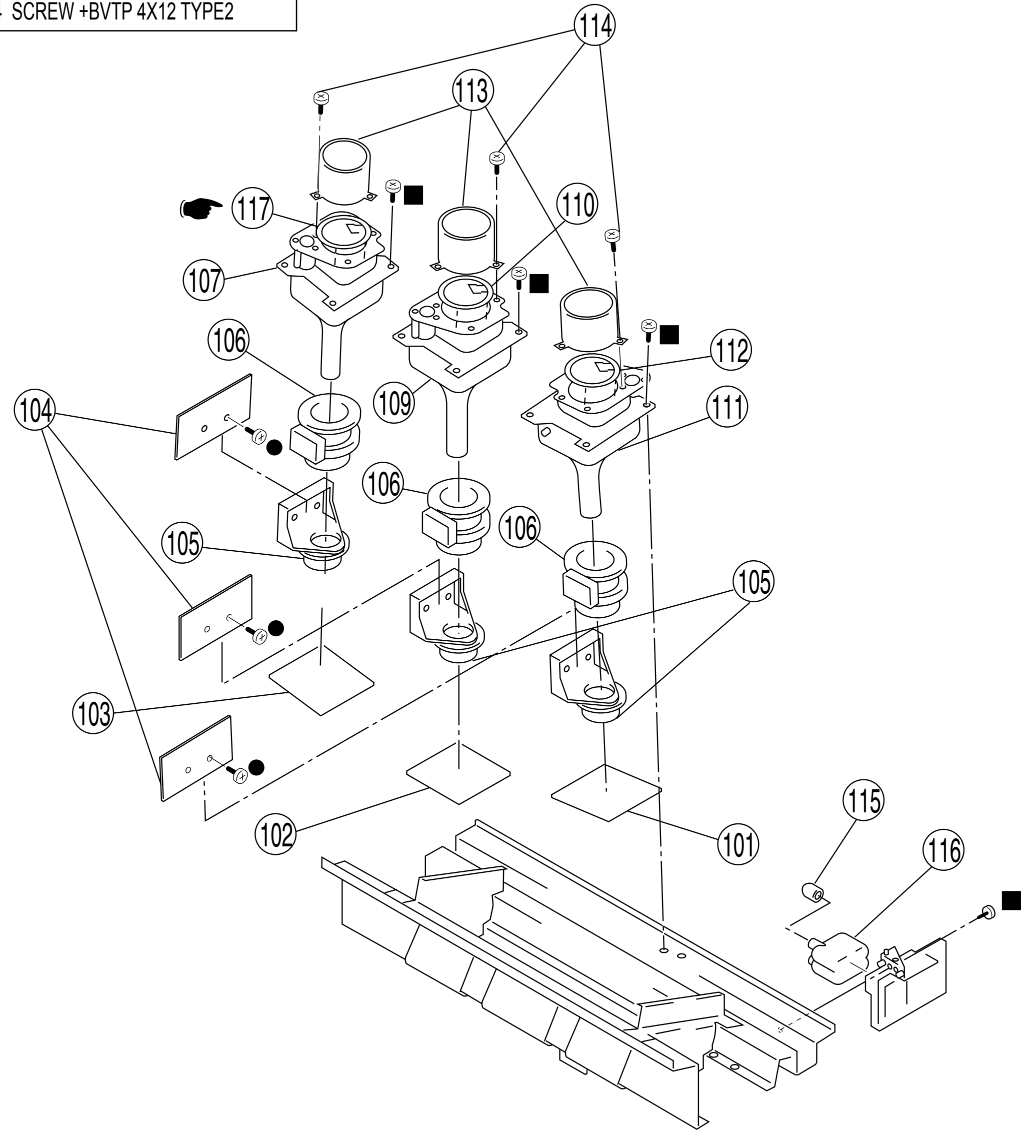
	REF.NO.		PART NO.	DESCRIPTION
	70		3-710-578-01	COVER, VOLUME, 6 MOLD
☛	71	*	A-1300-883-A	D BOARD, COMPLETE The high-voltage leads associated with the FBT on this board are not included and must be ordered separately.
⚠	72		1-453-285-51	FBT ASSY, NX-4006//X4P4
⚠			1-779-095-51	LEAD ASSY, HIGH-VOLTAGE
⚠			1-900-260-40	CONNECTOR ASSY, MV
⚠	73		1-769-837-11	CORD, POWER(WITH NOISE FILTER)
	74		1-500-082-11	CLAMP, FERRITE
	75		1-469-241-11	CORE, FERRITE
	76		X-4040-459-1	CABINET ASSY KP-65WV600 ONLY
	76		X-4040-320-1	CABINET ASSY KP-65WV700 ONLY
	77		3-184-556-01	CASTER
	78		4-030-850-01	SOCKET, CASTER
	79		4-075-020-01	FOOT, PLASTIC
	80		4-081-063-01	SCREW,DOME WASHER HEX TAP 4X20 KP-57WV600/57WV700 ONLY

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

6-4. PICTURE TUBE

● 7-685-648-79 SCREW +BVTP 3X12 TYPE2 IT-3
■ 7-685-661-14 SCREW +BVTP 4X12 TYPE2



REF.NO.		PART NO.	DESCRIPTION
101		A-1401-420-A	CB MOUNT (VAR) KP-57WV600/57WV700 ONLY
101		A-1401-387-A	CB MOUNT (VAR) KP-65WV600/65WV700 ONLY
102		A-1401-419-A	CG MOUNT (VAR) KP-57WV600/57WV700 ONLY
102		A-1401-386-A	CG MOUNT (VAR) KP-65WV600/65WV700 ONLY
103	*	A-1401-385-A	CR MOUNT (VAR)
104	*	A-1401-589-A	VM MOUNT (VAR)
⚠ 105		1-452-790-31	NECK ASSY
⚠ 106		1-451-537-22	DEFLECTION YOKE
☛ ⚠ 107		8-733-647-25	CRT 07MVC41(B)-L(VM) KP-57WV600 ONLY
☛ ⚠ 107		8-733-668-25	CRT 07MVC42(B)-L KP-57WV700 ONLY
☛ ⚠ 107		8-733-665-25	CRT 07MVC61(B)-L KP-65WV600 ONLY
☛ ⚠ 107		8-733-663-25	CRT 07MVC62(B)-L KP-65WV700 ONLY
⚠ 109		8-733-652-15	CRT 07MVC21(G)-L(VM) KP-57WV600/65WV600 ONLY
⚠ 109		8-733-667-15	CRT 07MVC22(G)-L KP-57WV700/65WV700 ONLY
110		4-088-543-01	SHADE (G) KP-57WV700/65WV700 ONLY
⚠ 111		8-733-648-15	CRT 07MVC41(R)-L(VM) KP-57WV600 ONLY
⚠ 111		8-733-669-15	CRT 07MVC42(R)-L KP-57WV700 ONLY
⚠ 111		8-733-666-15	CRT 07MVC61(R)-L KP-65WV600 ONLY
⚠ 111		8-733-664-15	CRT 07MVC62(R)-L KP-65WV700 ONLY
112		4-088-542-01	SHADE (R) KP-57WV700/65WV700 ONLY
113		4-083-750-01	LENS (DELTA 260) KP-57WV600 ONLY
113		4-087-841-01	LENS (DELTA 265) KP-57WV700/65WV700 ONLY
113		4-087-842-01	LENS (DELTA 270) KP-65WV600 ONLY
114		4-052-894-01	SCREW (4X20), HEAD TAPPING
115		4-373-137-01	CAP (Z), RUBBER
☛ ⚠ 116		8-598-955-32	BLOCK ASSY, HV HVB-1031
☛ 117		4-090-058-01	SHADE (B) KP-57WV700/65WV700 ONLY

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

BM1C

The BM1C board is not field repairable. If service is required, use the following part number to order a complete replacement board. Data is provided for reference only.

*** A-1300-690-A BM1C BOARD COMPLETE**

CAPACITOR

	REF.NO.	PART NO.	DESCRIPTION	VALUES		
	C103	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
	C105	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
	C106	1-164-156-11	CERAMIC CHIP	0.1μF		25V
	C107	1-126-390-11	ELECT CHIP	22μF	20%	6.3V
	C108	1-164-156-11	CERAMIC CHIP	0.1μF		25V
	C110	1-126-394-11	ELECT CHIP	10μF	20%	16V
	C112	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
	C118	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
	C123	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
	C124	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
	C125	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V
	C126	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
	C127	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
	C128	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
	C129	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
	C130	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
	C131	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
	C132	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
	C133	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
	C134	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
	C135	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
	C136	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
	C137	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
	C138	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
	C139	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
	C141	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
	C142	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
	C143	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
	C144	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
	C145	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
	C146	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
	C147	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
	C148	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
	C151	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
	C154	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
	C162	1-126-394-11	ELECT CHIP	10μF	20%	16V
	C163	1-126-394-11	ELECT CHIP	10μF	20%	16V
	C164	1-126-390-11	ELECT CHIP	22μF	20%	6.3V
	C165	1-124-779-00	ELECT CHIP	10μF	20%	16V
	C166	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V

CONNECTOR

	REF.NO.	PART NO.	DESCRIPTION
*	CN104	1-816-933-21	CONNECTOR, BOARD TO BOARD 60P

DIODE

REF.NO.	PART NO.	DESCRIPTION	VALUES
D101	8-719-024-77	DIODE	HN1D03FU-TE85L
D102	8-719-024-77	DIODE	HN1D03FU-TE85L
D201	8-719-024-77	DIODE	HN1D03FU-TE85L

FERRITE BEAD

REF.NO.	PART NO.	DESCRIPTION	VALUES
FB101	1-414-921-11	FERRITE	0μH
FB102	1-414-921-11	FERRITE	0μH
FB103	1-414-921-11	FERRITE	0μH
FB104	1-414-921-11	FERRITE	0μH
FB106	1-500-451-11	FERRITE	0μH
FB109	1-414-921-11	FERRITE	0μH
FB110	1-414-921-11	FERRITE	0μH
FB111	1-414-921-11	FERRITE	0μH
FB120	1-414-921-11	FERRITE	0μH
FB121	1-414-921-11	FERRITE	0μH
FB122	1-414-921-11	FERRITE	0μH
FB123	1-414-921-11	FERRITE	0μH
FB124	1-414-921-11	FERRITE	0μH
FB137	1-414-921-11	FERRITE	0μH
FB141	1-414-921-11	FERRITE	0μH
FB143	1-414-921-11	FERRITE	0μH
FB149	1-414-921-11	FERRITE	0μH

IC

REF.NO.	PART NO.	DESCRIPTION	VALUES
IC101	6-702-978-01	IC	MD2406
IC102	6-802-277-11	IC	SST39VF800A70E-11300-T
IC104	8-759-460-72	IC	BA033FP-E2
IC106	8-759-697-54	IC	BR24C21F-E2
IC107	8-759-331-27	IC	MM1096AFF
IC108	6-702-511-11	IC	MT48LC8M16A2TG-75-Y95WT
IC111	8-759-832-05	IC	BA18BC0FP-E2
IC121	8-752-932-19	IC	CXP86608-001R

COIL

REF.NO.	PART NO.	DESCRIPTION	VALUES
L106	1-469-555-21	INDUCTOR	10μH
L107	1-469-561-21	INDUCTOR	100μH

TRANSISTOR

REF.NO.	PART NO.	DESCRIPTION	VALUES
Q101	8-729-013-28	TRANSISTOR	HN1B01FU-TE85R
Q103	8-729-905-35	TRANSISTOR	2SC4081-R
Q105	8-729-427-72	TRANSISTOR	XP4501
Q110	8-729-900-53	TRANSISTOR	DTC114EK
Q116	8-729-900-53	TRANSISTOR	DTC114EK
Q201	8-729-026-53	TRANSISTOR	2SA1576A-T106-QR
Q202	8-729-028-28	TRANSISTOR	2SK2036(TE85L)
Q203	8-729-028-28	TRANSISTOR	2SK2036(TE85L)

RESISTOR

REF.NO.	PART NO.	DESCRIPTION	VALUES		
R101	1-216-797-11	METAL CHIP	10	5%	1/10W
R102	1-216-797-11	METAL CHIP	10	5%	1/10W
R103	1-216-797-11	METAL CHIP	10	5%	1/10W
R105	1-216-797-11	METAL CHIP	10	5%	1/10W
R110	1-216-833-11	METAL CHIP	10K	5%	1/10W
R111	1-216-833-11	METAL CHIP	10K	5%	1/10W
R112	1-216-833-11	METAL CHIP	10K	5%	1/10W
R113	1-216-833-11	METAL CHIP	10K	5%	1/10W
R120	1-216-833-11	METAL CHIP	10K	5%	1/10W
R121	1-216-833-11	METAL CHIP	10K	5%	1/10W
R124	1-216-864-11	SHORT CHIP			
R125	1-216-864-11	SHORT CHIP			
R127	1-216-833-11	METAL CHIP	10K	5%	1/10W
R128	1-216-864-11	SHORT CHIP			
R129	1-218-712-11	METAL CHIP	6.8K	0.50%	1/10W
R136	1-216-797-11	METAL CHIP	10	5%	1/10W
R137	1-216-864-11	SHORT CHIP			
R143	1-216-833-11	METAL CHIP	10K	5%	1/10W
R144	1-216-809-11	METAL CHIP	100	5%	1/10W
R145	1-216-809-11	METAL CHIP	100	5%	1/10W
R148	1-216-839-11	METAL CHIP	33K	5%	1/10W
R149	1-216-839-11	METAL CHIP	33K	5%	1/10W
R150	1-216-833-11	METAL CHIP	10K	5%	1/10W
R152	1-216-833-11	METAL CHIP	10K	5%	1/10W
R155	1-216-833-11	METAL CHIP	10K	5%	1/10W
R158	1-216-864-11	SHORT CHIP			
R161	1-216-801-11	METAL CHIP	22	5%	1/10W
R164	1-216-833-11	METAL CHIP	10K	5%	1/10W
R186	1-216-864-11	SHORT CHIP			
R189	1-216-864-11	SHORT CHIP			
R190	1-216-864-11	SHORT CHIP			
R201	1-216-845-11	METAL CHIP	100K	5%	1/10W
R202	1-216-833-11	METAL CHIP	10K	5%	1/10W
R203	1-216-833-11	METAL CHIP	10K	5%	1/10W
R205	1-216-833-11	METAL CHIP	10K	5%	1/10W
R206	1-216-809-11	METAL CHIP	100	5%	1/10W
R208	1-216-845-11	METAL CHIP	100K	5%	1/10W
R209	1-216-845-11	METAL CHIP	100K	5%	1/10W
R213	1-218-830-11	METAL CHIP	200	0.50%	1/10W
R217	1-216-833-11	METAL CHIP	10K	5%	1/10W
R218	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R219	1-216-833-11	METAL CHIP	10K	5%	1/10W
R221	1-216-809-11	METAL CHIP	100	5%	1/10W
R222	1-216-833-11	METAL CHIP	10K	5%	1/10W
R226	1-216-833-11	METAL CHIP	10K	5%	1/10W
R230	1-216-833-11	METAL CHIP	10K	5%	1/10W
R232	1-218-709-11	METAL CHIP	5.1K	0.50%	1/10W
R238	1-216-864-11	SHORT CHIP			
R239	1-216-833-11	METAL CHIP	10K	5%	1/10W
R240	1-216-833-11	METAL CHIP	10K	5%	1/10W
R283	1-216-833-11	METAL CHIP	10K	5%	1/10W
R287	1-216-833-11	METAL CHIP	10K	5%	1/10W
R288	1-216-797-11	METAL CHIP	10	5%	1/10W
R290	1-216-797-11	METAL CHIP	10	5%	1/10W

RESISTOR BRIDGE

REF.NO.	PART NO.	DESCRIPTION	VALUES	
RB101	1-234-381-21	RES, NETWORK	100KX4	(1005)
RB102	1-234-381-21	RES, NETWORK	100KX4	(1005)
RB103	1-234-381-21	RES, NETWORK	100KX4	(1005)
RB104	1-234-381-21	RES, NETWORK	100KX4	(1005)
RB105	1-234-372-21	RES, NETWORK	100X4	(1005)
RB106	1-234-378-21	RES, NETWORK	10KX4	(1005)
RB107	1-234-370-21	RES, NETWORK	22X4	(1005)
RB108	1-234-370-21	RES, NETWORK	22X4	(1005)
RB109	1-234-370-21	RES, NETWORK	22X4	(1005)
RB110	1-234-370-21	RES, NETWORK	22X4	(1005)
RB111	1-234-370-21	RES, NETWORK	22X4	(1005)
RB112	1-234-370-21	RES, NETWORK	22X4	(1005)
RB113	1-234-378-21	RES, NETWORK	10KX4	(1005)
RB114	1-234-378-21	RES, NETWORK	10KX4	(1005)
RB115	1-234-378-21	RES, NETWORK	10KX4	(1005)

REF.NO.	PART NO.	DESCRIPTION	VALUES
RB121	1-234-371-21	RES, NETWORK 47X4	(1005)
RB122	1-234-371-21	RES, NETWORK 47X4	(1005)
RB123	1-234-371-21	RES, NETWORK 47X4	(1005)
RB124	1-234-371-21	RES, NETWORK 47X4	(1005)
RB131	1-234-378-21	RES, NETWORK 10KX4	(1005)
RB132	1-234-378-21	RES, NETWORK 10KX4	(1005)
RB133	1-234-378-21	RES, NETWORK 10KX4	(1005)
RB134	1-234-378-21	RES, NETWORK 10KX4	(1005)

CRYSTAL

REF.NO.	PART NO.	DESCRIPTION	VALUES
X101	1-795-725-21	CRYSTAL OSCILLATOR	(SMD)
X102	1-795-313-21	VIBRATOR, CERAMIC	

AD

The AD board is not field repairable. If service is required, use the following part number to order a complete replacement board. Data is provided for reference only.

* **A-1300-887-A AD BOARD, COMPLETE**

CAPACITOR

REF.NO.	PART NO.	DESCRIPTION	VALUES		
C9401	1-126-933-11	ELECT	100μF	20%	16V
C9402	1-126-933-11	ELECT	100μF	20%	16V
C9403	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9404	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C9405	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9406	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9407	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9408	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C9409	1-126-933-11	ELECT	100μF	20%	16V
C9410	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9411	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C9413	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9414	1-126-933-11	ELECT	100μF	20%	16V
C9415	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9416	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9419	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9422	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9424	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9425	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9426	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9427	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9428	1-126-933-11	ELECT	100μF	20%	16V
C9429	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9430	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9431	1-126-963-11	ELECT	4.7μF	20%	50V
C9432	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C9433	1-126-933-11	ELECT	100μF	20%	16V
C9434	1-126-933-11	ELECT	100μF	20%	16V
C9440	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C9441	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C9442	1-115-412-11	CERAMIC CHIP	680pF	5%	25V
C9444	1-115-412-11	CERAMIC CHIP	680pF	5%	25V
C9446	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9447	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9448	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9450	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9452	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C9453	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C9454	1-162-910-11	CERAMIC CHIP	5pF	0.25pF	50V
C9458	1-162-910-11	CERAMIC CHIP	5pF	0.25pF	50V
C9459	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9460	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9461	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9462	1-126-933-11	ELECT	100μF	20%	16V
C9463	1-126-933-11	ELECT	100μF	20%	16V
C9464	1-126-933-11	ELECT	100μF	20%	16V
C9465	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9466	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9467	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9468	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C9469	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C9470	1-115-412-11	CERAMIC CHIP	680pF	5%	25V
C9472	1-115-412-11	CERAMIC CHIP	680pF	5%	25V
C9474	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9475	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9476	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9478	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9480	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C9481	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C9482	1-162-910-11	CERAMIC CHIP	5pF	0.25pF	50V
C9483	1-162-910-11	CERAMIC CHIP	5pF	0.25pF	50V
C9484	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9485	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9486	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9488	1-126-933-11	ELECT	100μF	20%	16V

REF.NO.	PART NO.	DESCRIPTION	VALUES		
C9489	1-126-933-11	ELECT	100μF	20%	16V
C9490	1-126-933-11	ELECT	100μF	20%	16V
C9491	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9492	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9493	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9494	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9495	1-162-968-11	CERAMIC CHIP	0.0047μF	10%	50V
C9498	1-126-933-11	ELECT	100μF	20%	16V
C9501	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C9502	1-115-412-11	CERAMIC CHIP	680pF	5%	25V
C9503	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C9505	1-115-412-11	CERAMIC CHIP	680pF	5%	25V
C9506	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9508	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9509	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9511	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C9512	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9514	1-162-910-11	CERAMIC CHIP	5pF	0.25pF	50V
C9515	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C9516	1-162-910-11	CERAMIC CHIP	5pF	0.25pF	50V
C9517	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9518	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9520	1-164-173-11	CERAMIC CHIP	0.0039μF	10%	50V
C9521	1-164-173-11	CERAMIC CHIP	0.0039μF	10%	50V
C9523	1-164-173-11	CERAMIC CHIP	0.0039μF	10%	50V
C9524	1-164-173-11	CERAMIC CHIP	0.0039μF	10%	50V
C9525	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9526	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9527	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9528	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9531	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9532	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9540	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9541	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9542	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9543	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9546	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9547	1-164-392-11	CERAMIC CHIP	390pF	5%	50V
C9548	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C9549	1-115-416-11	CERAMIC CHIP	0.001μF	5%	25V
C9550	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9552	1-162-974-11	CERAMIC CHIP	0.01μF		50V
C9553	1-126-947-11	ELECT	47μF	20%	35V

REF.NO.	PART NO.	DESCRIPTION	VALUES		
C9554	1-126-947-11	ELECT	47μF	20%	35V
C9555	1-126-947-11	ELECT	47μF	20%	35V
C9556	1-126-916-11	ELECT	1000μF	20%	6.3V
C9557	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9558	1-126-933-11	ELECT	100μF	20%	16V
C9559	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9560	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9561	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C9562	1-126-935-11	ELECT	470μF	20%	16V

CONNECTOR

REF.NO.	PART NO.	DESCRIPTION	VALUES
CN9400	1-764-613-11	CONNECTOR, BOARD TO BOARD	20P
CN9401	1-764-613-11	CONNECTOR, BOARD TO BOARD	20P
* CN9402	1-564-511-11	PLUG, CONNECTOR	8P

DIODE

REF.NO.	PART NO.	DESCRIPTION	VALUES
D9400	8-719-988-61	DIODE	1SS355TE-17
D9401	8-719-988-61	DIODE	1SS355TE-17
D9402	8-719-988-61	DIODE	1SS355TE-17
D9404	8-719-988-61	DIODE	1SS355TE-17
D9405	8-719-988-61	DIODE	1SS355TE-17
D9406	8-719-069-54	DIODE	UDZSTE-175.1B
D9407	8-719-069-54	DIODE	UDZSTE-175.1B
D9408	8-719-069-54	DIODE	UDZSTE-175.1B
D9409	8-719-069-54	DIODE	UDZSTE-175.1B

FERRITE BEAD

REF.NO.	PART NO.	DESCRIPTION	VALUES
FB9401	1-414-445-11	FERRITE	0μH
FB9402	1-414-445-11	FERRITE	0μH
FB9403	1-414-445-11	FERRITE	0μH
FB9404	1-414-445-11	FERRITE	0μH
FB9405	1-414-445-11	FERRITE	0μH
FB9406	1-414-445-11	FERRITE	0μH
FB9407	1-414-445-11	FERRITE	0μH
FB9408	1-414-445-11	FERRITE	0μH
FB9409	1-414-445-11	FERRITE	0μH
FB9410	1-414-445-11	FERRITE	0μH
FB9411	1-414-445-11	FERRITE	0μH
FB9412	1-414-445-11	FERRITE	0μH
FB9413	1-414-445-11	FERRITE	0μH
FB9414	1-414-445-11	FERRITE	0μH
FB9415	1-414-445-11	FERRITE	0μH
FB9416	1-414-445-11	FERRITE	0μH
FB9417	1-414-445-11	FERRITE	0μH

REF.NO.	PART NO.	DESCRIPTION	VALUES		
	IC				
IC9400	8-752-933-62	IC	CXP86460-647Q		
IC9401	8-759-683-55	IC	CM0017AF		
IC9402	6-700-319-01	IC	M24128-BWMN6T		
IC9403	8-759-352-91	IC	PST9143NL		
IC9405	8-759-830-08	IC	NJM2068V-TE2		
IC9406	8-759-830-08	IC	NJM2068V-TE2		
IC9407	8-759-829-87	IC	CD0031AM		
IC9408	8-759-830-08	IC	NJM2068V-TE2		
IC9409	8-759-830-08	IC	NJM2068V-TE2		
IC9410	8-759-830-08	IC	NJM2068V-TE2		
IC9411	8-759-830-08	IC	NJM2068V-TE2		
IC9413	8-759-278-58	IC	NJM4558V-TE2		
IC9414	8-759-278-58	IC	NJM4558V-TE2		
IC9415	8-759-278-58	IC	NJM4558V-TE2		
IC9416	8-759-278-58	IC	NJM4558V-TE2		
IC9420	8-759-830-08	IC	NJM2068V-TE2		
IC9421	8-759-662-86	IC	NJM79M05DL1A(TE2)		
IC9422	8-759-641-26	IC	NJM2391DL1-33(TE1)		
	COIL				
L9401	1-469-555-21	INDUCTOR	10μH		
	TRANSISTOR				
Q9400	8-729-026-49	TRANSISTOR	2SA1037AK-T146-R		
Q9401	8-729-026-49	TRANSISTOR	2SA1037AK-T146-R		
Q9402	8-729-026-49	TRANSISTOR	2SA1037AK-T146-R		
Q9403	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q9405	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q9406	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q9407	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q9408	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q9411	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q9412	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q9413	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q9414	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q9415	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q9416	8-729-028-28	TRANSISTOR	2SK2036(TE85L)		
Q9417	8-729-028-28	TRANSISTOR	2SK2036(TE85L)		
	RESISTOR				
R9400	1-216-841-11	METAL CHIP	47K	5%	1/10W
R9401	1-216-809-11	METAL CHIP	100	5%	1/10W
R9402	1-216-833-11	METAL CHIP	10K	5%	1/10W
R9404	1-216-833-11	METAL CHIP	10K	5%	1/10W
R9405	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9406	1-216-837-11	METAL CHIP	22K	5%	1/10W
R9407	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9408	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9410	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R9411	1-216-809-11	METAL CHIP	100	5%	1/10W
R9412	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R9413	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R9414	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R9415	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9416	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R9417	1-216-809-11	METAL CHIP	100	5%	1/10W
R9418	1-216-809-11	METAL CHIP	100	5%	1/10W
R9419	1-216-839-11	METAL CHIP	33K	5%	1/10W
R9420	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9421	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9422	1-216-818-11	METAL CHIP	560	5%	1/10W
R9423	1-216-809-11	METAL CHIP	100	5%	1/10W
R9424	1-216-809-11	METAL CHIP	100	5%	1/10W
R9425	1-216-833-11	METAL CHIP	10K	5%	1/10W
R9426	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9428	1-216-809-11	METAL CHIP	100	5%	1/10W
R9429	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R9430	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9431	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R9432	1-216-815-11	METAL CHIP	330	5%	1/10W
R9433	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R9434	1-216-833-11	METAL CHIP	10K	5%	1/10W
R9435	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R9436	1-216-809-11	METAL CHIP	100	5%	1/10W
R9437	1-216-809-11	METAL CHIP	100	5%	1/10W
R9438	1-216-815-11	METAL CHIP	330	5%	1/10W
R9439	1-216-815-11	METAL CHIP	330	5%	1/10W
R9440	1-216-817-11	METAL CHIP	470	5%	1/10W
R9441	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R9442	1-218-700-11	METAL CHIP	2.2K	0.50%	1/10W
R9443	1-218-692-11	METAL CHIP	1K	0.50%	1/10W
R9444	1-216-837-11	METAL CHIP	22K	5%	1/10W
R9446	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9447	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9448	1-216-818-11	METAL CHIP	560	5%	1/10W

REF.NO.	PART NO.	DESCRIPTION	VALUES		
R9449	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R9450	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R9451	1-218-700-11	METAL CHIP	2.2K	0.50%	1/10W
R9452	1-218-700-11	METAL CHIP	2.2K	0.50%	1/10W
R9453	1-216-833-11	METAL CHIP	10K	5%	1/10W
R9454	1-218-700-11	METAL CHIP	2.2K	0.50%	1/10W
R9455	1-218-700-11	METAL CHIP	2.2K	0.50%	1/10W
R9456	1-216-833-11	METAL CHIP	10K	5%	1/10W
R9457	1-216-833-11	METAL CHIP	10K	5%	1/10W
R9458	1-216-833-11	METAL CHIP	10K	5%	1/10W
R9459	1-218-724-11	METAL CHIP	22K	0.50%	1/10W
R9460	1-218-724-11	METAL CHIP	22K	0.50%	1/10W
R9461	1-218-724-11	METAL CHIP	22K	0.50%	1/10W
R9462	1-218-724-11	METAL CHIP	22K	0.50%	1/10W
R9463	1-218-716-11	METAL CHIP	10K	0.50%	1/10W
R9464	1-218-716-11	METAL CHIP	10K	0.50%	1/10W
R9465	1-218-716-11	METAL CHIP	10K	0.50%	1/10W
R9466	1-218-716-11	METAL CHIP	10K	0.50%	1/10W
R9467	1-218-700-11	METAL CHIP	2.2K	0.50%	1/10W
R9468	1-218-700-11	METAL CHIP	2.2K	0.50%	1/10W
R9469	1-218-700-11	METAL CHIP	2.2K	0.50%	1/10W
R9470	1-218-700-11	METAL CHIP	2.2K	0.50%	1/10W
R9471	1-218-724-11	METAL CHIP	22K	0.50%	1/10W
R9472	1-218-724-11	METAL CHIP	22K	0.50%	1/10W
R9473	1-218-724-11	METAL CHIP	22K	0.50%	1/10W
R9474	1-218-724-11	METAL CHIP	22K	0.50%	1/10W
R9475	1-218-716-11	METAL CHIP	10K	0.50%	1/10W
R9476	1-218-716-11	METAL CHIP	10K	0.50%	1/10W
R9477	1-218-716-11	METAL CHIP	10K	0.50%	1/10W
R9478	1-218-716-11	METAL CHIP	10K	0.50%	1/10W
R9479	1-218-700-11	METAL CHIP	2.2K	0.50%	1/10W
R9480	1-218-700-11	METAL CHIP	2.2K	0.50%	1/10W
R9481	1-218-700-11	METAL CHIP	2.2K	0.50%	1/10W
R9482	1-218-700-11	METAL CHIP	2.2K	0.50%	1/10W
R9483	1-218-724-11	METAL CHIP	22K	0.50%	1/10W
R9484	1-218-724-11	METAL CHIP	22K	0.50%	1/10W
R9485	1-218-724-11	METAL CHIP	22K	0.50%	1/10W
R9486	1-218-716-11	METAL CHIP	10K	0.50%	1/10W
R9487	1-218-724-11	METAL CHIP	22K	0.50%	1/10W
R9488	1-218-716-11	METAL CHIP	10K	0.50%	1/10W
R9489	1-218-716-11	METAL CHIP	10K	0.50%	1/10W
R9490	1-218-716-11	METAL CHIP	10K	0.50%	1/10W
R9494	1-216-855-11	METAL CHIP	680K	5%	1/10W
R9495	1-216-853-11	METAL CHIP	470K	5%	1/10W
R9496	1-216-853-11	METAL CHIP	470K	5%	1/10W
R9497	1-216-855-11	METAL CHIP	680K	5%	1/10W
R9502	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R9503	1-216-845-11	METAL CHIP	100K	5%	1/10W
R9504	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R9505	1-216-843-11	METAL CHIP	68K	5%	1/10W
R9509	1-216-843-11	METAL CHIP	68K	5%	1/10W
R9510	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R9511	1-216-845-11	METAL CHIP	100K	5%	1/10W
R9512	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R9515	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9516	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9520	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9524	1-215-866-11	METAL OXIDE	330	5%	1W
R9527	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9539	1-218-706-11	METAL CHIP	3.9K	0.50%	1/10W
R9540	1-218-702-11	METAL CHIP	2.7K	0.50%	1/10W
R9541	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R9542	1-218-714-11	METAL CHIP	8.2K	0.50%	1/10W
R9545	1-216-839-11	METAL CHIP	33K	5%	1/10W
R9546	1-218-720-11	METAL CHIP	15K	0.50%	1/10W
R9548	1-218-740-11	METAL CHIP	100K	0.50%	1/10W
R9549	1-218-722-11	METAL CHIP	18K	0.50%	1/10W
R9550	1-216-837-11	METAL CHIP	22K	5%	1/10W
R9551	1-216-809-11	METAL CHIP	100	5%	1/10W
R9553	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9554	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9555	1-216-833-11	METAL CHIP	10K	5%	1/10W
R9556	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9557	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9558	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9559	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9565	1-216-833-11	METAL CHIP	10K	5%	1/10W
R9566	1-216-833-11	METAL CHIP	10K	5%	1/10W
R9567	1-216-833-11	METAL CHIP	10K	5%	1/10W
R9568	1-216-864-11	SHORT CHIP			
R9569	1-216-864-11	SHORT CHIP			
R9570	1-216-864-11	SHORT CHIP			
R9571	1-216-864-11	SHORT CHIP			
R9572	1-216-833-11	METAL CHIP	10K	5%	1/10W
R9573	1-216-833-11	METAL CHIP	10K	5%	1/10W

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

REF.NO.	PART NO.	DESCRIPTION	VALUES		
R9574	1-216-797-11	METAL CHIP	10	5%	1/10W
R9575	1-216-797-11	METAL CHIP	10	5%	1/10W
	RESISTOR BRIDGE				
RB9400	1-233-576-11	RES, CHIP NETWORK		100	
RB9401	1-233-576-11	RES, CHIP NETWORK		100	
RB9402	1-233-576-11	RES, CHIP NETWORK		100	
	VARISTOR				
VD9404	1-804-499-21	VARISTOR, CHIP	(1608)		
VD9405	1-804-499-21	VARISTOR, CHIP	(1608)		
VD9406	1-804-499-21	VARISTOR, CHIP	(1608)		
VD9407	1-804-499-21	VARISTOR, CHIP	(1608)		
	CRYSTAL				
X9401	1-767-922-11	VIBRATOR, CERAMIC			

D

⚠	**A-1300-883-A**	**D BOARD COMPLETE**			
	The high-voltage leads associated with the FBT on this board are not included and must be ordered separately.				
⚠	1-779-095-51	LEAD ASSY, HIGH-VOLTAGE			
⚠	1-900-260-40	CONNECTOR ASSY, MV			
	4-382-854-11	SCREW (M3X10), P, SW (+)			
	7-682-952-09	SCREW +PSW 3X16			
	CAPACITOR				
C8001	1-164-227-11	CERAMIC CHIP	0.022μF	10%	25V
C8002	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C8003	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C8004	1-104-666-11	ELECT	220μF	20%	25V
C8005	1-126-942-61	ELECT	1000μF	20%	25V
C8006	1-126-942-61	ELECT	1000μF	20%	25V
C8007	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C8008	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C8009	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C8010	1-136-177-00	FILM	1μF	5%	50V
C8011	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C8012	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C8013	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C8014	1-104-665-11	ELECT	100μF	20%	25V
C8015	1-126-969-11	ELECT	220μF	20%	50V

REF.NO.	PART NO.	DESCRIPTION	VALUES		
C8016	1-104-665-11	ELECT	100μF	20%	25V
C8017	1-162-964-11	CERAMIC CHIP	0.001μF	10%	50V
C8018	1-126-964-11	ELECT	10μF	20%	50V
C8019	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C8020	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C8023	1-106-220-00	MYLAR	0.1μF	10%	100V
C8024	1-164-227-11	CERAMIC CHIP	0.022μF	10%	25V
C8025	1-126-968-11	ELECT	100μF	20%	50V
C8026	1-126-968-11	ELECT	100μF	20%	50V
C8028	1-126-968-11	ELECT	100μF	20%	50V
C8029	1-126-968-11	ELECT	100μF	20%	50V
C8031	1-107-636-11	ELECT	10μF	20%	160V
C8032	1-126-968-11	ELECT	100μF	20%	50V
C8033	1-126-968-11	ELECT	100μF	20%	50V
C8034	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C8035	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C8036	1-126-968-11	ELECT	100μF	20%	50V
C8037	1-126-968-11	ELECT	100μF	20%	50V
C8040	1-115-349-51	CERAMIC	0.01μF		2KV
C8041	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C8042	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C8045	1-126-965-91	ELECT	22μF	20%	50V
C8046	1-126-965-91	ELECT	22μF	20%	50V
C8047	1-162-974-11	CERAMIC CHIP	0.01μF		50V
C8048	1-126-965-91	ELECT	22μF	20%	50V
C8049	1-162-974-11	CERAMIC CHIP	0.01μF		50V
C8050	1-126-965-91	ELECT	22μF	20%	50V
C8051	1-102-038-00	CERAMIC	0.001μF		500V
C8052	1-126-965-91	ELECT	22μF	20%	50V
C8053	1-162-974-11	CERAMIC CHIP	0.01μF		50V
C8054	1-162-974-11	CERAMIC CHIP	0.01μF		50V
C8055	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C8056	1-107-652-11	ELECT	10μF	20%	250V
C8057	1-126-959-11	ELECT	0.47μF	20%	50V
C8058	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C8059	1-127-715-91	CERAMIC CHIP	0.22μF	10%	16V
C8060	1-104-665-11	ELECT	100μF	20%	25V
C8061	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C8062	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C8063	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C8064	1-107-636-11	ELECT	10μF	20%	160V
C8065	1-106-383-00	MYLAR	0.047μF	10%	200V
C8066	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V

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REF.NO.	PART NO.	DESCRIPTION	VALUES		
C8067	1-104-665-11	ELECT	100µF	20%	25V
C8068	1-162-318-11	CERAMIC	0.001µF	10%	500V
C8069	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C8070	1-126-964-11	ELECT	10µF	20%	50V
C8071	1-126-964-11	ELECT	10µF	20%	50V
C8072	1-126-964-11	ELECT	10µF	20%	50V
C8073	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C8074	1-104-665-11	ELECT	100µF	20%	25V
C8075	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C8076	1-128-551-11	ELECT	22µF	20%	63V
C8077	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C8078	1-115-416-11	CERAMIC CHIP	0.001µF	5%	25V
C8079	1-126-964-11	ELECT	10µF	20%	50V
C8080	1-126-964-11	ELECT	10µF	20%	50V
C8081	1-115-416-11	CERAMIC CHIP	0.001µF	5%	25V
C8082	1-165-176-11	CERAMIC CHIP	0.047µF	10%	16V
C8083	1-130-495-00	MYLAR	0.1µF	5%	50V
C8084	1-130-992-11	FILM	0.022µF	5%	50V
C8085	1-162-924-11	CERAMIC CHIP	56pF	5%	50V
C8086	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C8087	1-126-960-11	ELECT	1µF	20%	50V
C8088	1-126-964-11	ELECT	10µF	20%	50V
C8089	1-162-134-11	CERAMIC	470pF	10%	2KV
C8090	1-126-960-11	ELECT	1µF	20%	50V
C8091	1-104-665-11	ELECT	100µF	20%	25V
C8092	1-117-640-11	FILM	6800pF	3%	1.2KV
C8093	1-107-648-91	ELECT	100µF	20%	200V
C8094	1-126-947-11	ELECT	47µF	20%	35V
C8095	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C8096	1-136-684-51	FILM	0.0022µF	2.00%	100V
C8097	1-162-131-11	CERAMIC	220pF	10%	2KV
C8098	1-162-131-11	CERAMIC	220pF	10%	2KV
C8099	1-115-416-11	CERAMIC CHIP	0.001µF	5%	25V
C8100	1-104-665-11	ELECT	100µF	20%	25V
C8102	1-162-318-11	CERAMIC	0.001µF	10%	500V
C8103	1-126-964-11	ELECT	10µF	20%	50V
C8104	1-162-965-11	CERAMIC CHIP	0.0015µF	10%	50V
C8105	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C8106	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C8107	1-136-187-11	MYLAR	0.047µF	10%	250V
C8108	1-126-964-11	ELECT	10µF	20%	50V
C8109	1-162-924-11	CERAMIC CHIP	56pF	5%	50V

REF.NO.	PART NO.	DESCRIPTION	VALUES		
C8110	1-126-960-11	ELECT	1µF	20%	50V
C8111	1-126-960-11	ELECT	1µF	20%	50V
C8113	1-130-495-00	MYLAR	0.1µF	5%	50V
C8114	1-125-473-11	ELECT(BLOCK)	1000µF	20%	160V
C8115	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C8116	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C8117	1-162-318-11	CERAMIC	0.001µF	10%	500V
C8118	1-136-189-00	MYLAR	0.1µF	10%	250V
C8120	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C8121	1-115-349-51	CERAMIC	0.01µF		2KV
C8122	1-126-934-11	ELECT	220µF	20%	16V
C8123	1-107-444-11	CERAMIC	100pF	5%	2KV
⚠ C8124	1-117-642-11	FILM	8200pF	3%	1.2KV
C8125	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C8126	1-106-357-00	MYLAR	0.0039µF	99%	200V
C8127	1-126-942-61	ELECT	1000µF	20%	25V
C8129	1-137-150-11	FILM	0.01µF	5%	100V
C8131	1-128-582-11	ELECT	10µF	20%	100V
C8132	1-126-927-11	ELECT	2200µF	20%	10V
C8133	1-107-649-11	ELECT	2.2µF	20%	250V
C8135	1-117-813-11	FILM	0.75µF	5%	250V
C8136	1-130-495-00	MYLAR	0.1µF	5%	50V
C8137	1-126-927-11	ELECT	2200µF	20%	10V
C8138	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C8139	1-126-964-11	ELECT	10µF	20%	50V
C8140	1-102-030-00	CERAMIC	330pF	10%	500V
C8141	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C8142	1-117-664-11	FILM	0.27µF	5%	250V
C8143	1-109-889-11	ELECT	1µF	20%	50V
C8145	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C8146	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C8153	1-126-960-11	ELECT	1µF	20%	50V
C8154	1-126-947-11	ELECT	47µF	20%	35V
C8155	1-126-947-11	ELECT	47µF	20%	35V
C8156	1-107-636-11	ELECT	10µF	20%	160V
C8158	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C8159	1-106-383-00	MYLAR	0.047µF	10%	200V
C8160	1-127-715-91	CERAMIC CHIP	0.22µF	10%	16V
C8162	1-162-318-11	CERAMIC	0.001µF	10%	500V
C8163	1-126-960-11	ELECT	1µF	20%	50V
C8165	1-126-965-91	ELECT	22µF	20%	50V

CONNECTOR

	REF.NO.	PART NO.	DESCRIPTION	VALUES
*	CN8003	1-691-135-11	PIN, CONNECTOR (PC BOARD) 4P	
*	CN8006	1-564-506-11	PLUG, CONNECTOR 3P	
*	CN8007	1-564-506-11	PLUG, CONNECTOR 3P	
*	CN8008	1-564-506-11	PLUG, CONNECTOR 3P	
*	CN8009	1-564-506-11	PLUG, CONNECTOR 3P	
*	CN8010	1-564-507-11	PLUG, CONNECTOR 4P	
*	CN8011	1-564-507-11	PLUG, CONNECTOR 4P	
*	CN8012	1-564-507-11	PLUG, CONNECTOR 4P	
	CN8013	1-779-092-11	PIN, CONNECTOR (PC BOARD) 10P	
*	CN8015	1-506-371-00	PIN, CONNECTOR 2P	
*	CN8016	1-564-507-11	PLUG, CONNECTOR 4P	
*	CN8018	1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P	
*	CN8019	1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P	
*	CN8020	1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P	
*	CN8022	1-564-510-11	PLUG, CONNECTOR 7P	
*	CN8023	1-564-507-11	PLUG, CONNECTOR 4P	
*	CN8025	1-779-890-11	CONNECTOR, BOARD TO BOARD 10P	
	CN8026	1-764-611-11	CONNECTOR, BOARD TO BOARD 20P	
	CN8027	1-764-611-11	CONNECTOR, BOARD TO BOARD 20P	
*	CN8028	1-564-507-11	PLUG, CONNECTOR 4P	
*	CN8029	1-564-510-11	PLUG, CONNECTOR 7P	
*	CN8030	1-564-510-11	PLUG, CONNECTOR 7P	
*	CN8031	1-779-890-11	CONNECTOR, BOARD TO BOARD 10P	

DIODE

REF.NO.	PART NO.	DESCRIPTION	VALUES
D8001	8-719-109-89	DIODE	RD5.6ESB2
D8002	8-719-110-53	DIODE	RD20ESB2
D8003	8-719-924-13	DIODE	MTZJ-T-77-22B
D8004	8-719-908-03	DIODE	GP08D
D8005	8-719-988-61	DIODE	1SS355TE-17
D8006	8-719-988-61	DIODE	1SS355TE-17
D8008	8-719-988-61	DIODE	1SS355TE-17
D8010	8-719-988-61	DIODE	1SS355TE-17
D8011	8-719-988-61	DIODE	1SS355TE-17
D8012	8-719-988-61	DIODE	1SS355TE-17
D8013	8-719-109-85	DIODE	RD5.1ESB2
D8014	8-719-109-85	DIODE	RD5.1ESB2
D8015	8-719-988-61	DIODE	1SS355TE-17
D8016	8-719-988-61	DIODE	1SS355TE-17
D8019	8-719-988-61	DIODE	1SS355TE-17
D8020	8-719-988-61	DIODE	1SS355TE-17
D8022	8-719-988-61	DIODE	1SS355TE-17
D8023	8-719-988-61	DIODE	1SS355TE-17
D8024	8-719-110-41	DIODE	RD15ESB2
D8025	8-719-988-61	DIODE	1SS355TE-17
D8026	8-719-109-89	DIODE	RD5.6ESB2
D8027	8-719-028-45	DIODE	D2L20U
D8028	8-719-110-41	DIODE	RD15ESB2
D8029	8-719-027-43	DIODE	S2L20µF
D8030	8-719-027-43	DIODE	S2L20µF
D8032	8-719-302-43	DIODE	EL1Z
D8033	8-719-028-72	DIODE	RGP02-17EL-6433
D8036	8-719-110-41	DIODE	RD15ESB2
D8037	8-719-028-45	DIODE	D2L20U
D8038	8-719-302-43	DIODE	EL1Z
D8039	8-719-028-72	DIODE	RGP02-17EL-6433
D8042	8-719-988-61	DIODE	1SS355TE-17
D8043	8-719-988-61	DIODE	1SS355TE-17
D8045	8-719-908-03	DIODE	GP08D
D8047	8-719-988-61	DIODE	1SS355TE-17
D8050	8-719-988-61	DIODE	1SS355TE-17
D8051	8-719-988-61	DIODE	1SS355TE-17
D8052	8-719-988-61	DIODE	1SS355TE-17

FERRITE BEAD

REF.NO.	PART NO.	DESCRIPTION	VALUES
FB8001	1-469-578-11	FERRITE	1.1µH
FB8002	1-469-578-11	FERRITE	1.1µH
FB8005	1-469-869-21	FERRITE	0µH
FB8006	1-469-869-21	FERRITE	0µH
FB8014	1-469-869-21	FERRITE	0µH
FB8015	1-469-869-21	FERRITE	0µH
FB8016	1-469-869-21	FERRITE	0µH
FB8017	1-469-869-21	FERRITE	0µH
FB8018	1-469-869-21	FERRITE	0µH
FB8021	1-469-578-11	FERRITE	1.1µH
FB8022	1-469-579-11	FERRITE	0.45µH
FB8023	1-469-579-11	FERRITE	0.45µH

IC

REF.NO.	PART NO.	DESCRIPTION	VALUES
IC8001	8-749-019-08	IC	STK392-560
IC8002	8-749-019-08	IC	STK392-560
IC8003	8-759-593-33	IC	LA78045
IC8004	8-759-701-79	IC	NJM7812FA
IC8005	8-759-585-82	IC	BA9759F-E2
IC8006	8-759-700-07	IC	NJM2903M
IC8007	8-759-700-07	IC	NJM2903M
IC8008	8-759-585-82	IC	BA9759F-E2

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	REF.NO.	PART NO.	DESCRIPTION	VALUES		
	IC8009	8-759-803-42	IC	LA6500-FA		
	IC8010	8-759-471-81	IC	PQ05RD11		
	IC8012	8-759-701-01	IC	NJM2904M		

COIL

	REF.NO.	PART NO.	DESCRIPTION	VALUES
	L8001	1-412-533-21	INDUCTOR	47µH
	L8002	1-412-533-21	INDUCTOR	47µH
	L8003	1-412-525-31	INDUCTOR	10µH
	L8004	1-412-533-21	INDUCTOR	47µH
	L8005	1-412-533-21	INDUCTOR	47µH
	L8006	1-412-525-31	INDUCTOR	10µH
	L8007	1-412-533-21	INDUCTOR	47µH
	L8008	1-412-533-21	INDUCTOR	47µH
	L8009	1-412-525-31	INDUCTOR	10µH
	L8010	1-414-187-11	INDUCTOR	47µH
	L8011	1-414-856-11	INDUCTOR	10µH
	L8012	1-414-187-11	INDUCTOR	47µH
	L8013	1-414-856-11	INDUCTOR	10µH
	L8014	1-414-189-31	INDUCTOR	100µH
	L8015	1-414-189-31	INDUCTOR	100µH
	L8016	1-412-537-31	INDUCTOR	100µH
	L8017	1-414-856-11	INDUCTOR	10µH
	L8018	1-406-667-11	INDUCTOR	220µH
	L8019	1-456-109-11	COIL,HORIZONTAL LINEARITY(HLC)	
	L8020	1-412-525-31	INDUCTOR	10µH
	L8021	1-406-659-11	INDUCTOR	10µH
	L8022	1-412-552-11	INDUCTOR	2.2MH
	L8025	1-414-856-11	INDUCTOR	10µH
	L8026	1-414-856-11	INDUCTOR	10µH
	L8028	1-414-187-11	INDUCTOR	47µH
	L8029	1-414-187-11	INDUCTOR	47µH
	L8030	1-414-187-11	INDUCTOR	47µH
	L8031	1-414-187-11	INDUCTOR	47µH
	L8032	1-414-856-11	INDUCTOR	10µH
	L8033	1-414-856-11	INDUCTOR	10µH

NEON LAMP

	REF.NO.	PART NO.	DESCRIPTION	VALUES
	NL8001	1-517-778-21	LAMP, NEON	

IC LINK

	REF.NO.	PART NO.	DESCRIPTION	VALUES	
⚠	PS8001	1-533-595-31	IC LINK	3.15A	90V
⚠	PS8002	1-533-595-31	IC LINK	3.15A	90V
⚠	PS8003	1-533-595-31	IC LINK	3.15A	90V
⚠	PS8004	1-533-595-31	IC LINK	3.15A	90V
⚠	PS8005	1-533-595-31	IC LINK	3.15A	90V
⚠	PS8006	1-533-595-31	IC LINK	3.15A	90V
⚠	PS8007	1-533-594-31	IC LINK	2.5A	90V
	PS8008	1-532-685-00	IC LINK	0.8A	50V

TRANSISTOR

	REF.NO.	PART NO.	DESCRIPTION	VALUES
	Q8001	8-729-120-28	TRANSISTOR	2SC1623-L5L6
	Q8002	8-729-046-80	TRANSISTOR	2SC4634LS-CB11
	Q8003	8-729-026-49	TRANSISTOR	2SA1037AK-T146-R
	Q8004	8-729-026-49	TRANSISTOR	2SA1037AK-T146-R
	Q8007	8-729-046-80	TRANSISTOR	2SC4634LS-CB11
	Q8008	8-729-207-89	TRANSISTOR	2SA1358-Y
	Q8009	8-729-207-82	TRANSISTOR	2SC3421-Y
	Q8010	8-729-120-28	TRANSISTOR	2SC1623-L5L6
	Q8011	8-729-026-49	TRANSISTOR	2SA1037AK-T146-R
	Q8014	8-729-120-28	TRANSISTOR	2SC1623-L5L6
	Q8015	8-729-120-28	TRANSISTOR	2SC1623-L5L6
	Q8016	8-729-120-28	TRANSISTOR	2SC1623-L5L6
	Q8019	8-729-026-49	TRANSISTOR	2SA1037AK-T146-R
	Q8020	8-729-120-28	TRANSISTOR	2SC1623-L5L6
	Q8021	8-729-120-28	TRANSISTOR	2SC1623-L5L6
	Q8022	8-729-120-28	TRANSISTOR	2SC1623-L5L6
	Q8023	8-729-048-47	TRANSISTOR	2SC2688(5)-LK
	Q8024	6-550-144-01	TRANSISTOR	2SC5778-YB
	Q8027	6-550-153-01	TRANSISTOR	FQpF12P20XDTU
	Q8028	8-729-120-28	TRANSISTOR	2SC1623-L5L6
	Q8029	8-729-120-28	TRANSISTOR	2SC1623-L5L6
	Q8030	8-729-026-49	TRANSISTOR	2SA1037AK-T146-R
	Q8031	8-729-120-28	TRANSISTOR	2SC1623-L5L6
	Q8035	6-550-153-01	TRANSISTOR	FQpF12P20XDTU
	Q8039	8-729-048-47	TRANSISTOR	2SC2688(5)-LK
	Q8041	8-729-026-49	TRANSISTOR	2SA1037AK-T146-R
	Q8042	8-729-048-47	TRANSISTOR	2SC2688(5)-LK
	Q8043	6-550-144-01	TRANSISTOR	2SC5778-YB
	Q8044	8-729-120-28	TRANSISTOR	2SC1623-L5L6
	Q8101	8-729-026-49	TRANSISTOR	2SA1037AK-T146-R

RESISTOR

	REF.NO.	PART NO.	DESCRIPTION	VALUES		
	R8001	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
	R8002	1-216-809-11	METAL CHIP	100	5%	1/10W
	R8003	1-216-809-11	METAL CHIP	100	5%	1/10W
	R8004	1-216-809-11	METAL CHIP	100	5%	1/10W
	R8005	1-215-875-11	METAL OXIDE	10K	5%	1W

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	REF.NO.	PART NO.	DESCRIPTION	VALUES		
	R8007	1-216-809-11	METAL CHIP	100	5%	1/10W
	R8008	1-216-809-11	METAL CHIP	100	5%	1/10W
	R8009	1-216-809-11	METAL CHIP	100	5%	1/10W
	R8010	1-260-131-11	CARBON	470K	5%	1/2W
	R8011	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
	R8012	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
	R8013	1-218-710-11	METAL CHIP	5.6K	0.50%	1/10W
	R8014	1-218-710-11	METAL CHIP	5.6K	0.50%	1/10W
	R8015	1-216-837-11	METAL CHIP	22K	5%	1/10W
	R8016	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
	R8017	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
	R8018	1-216-821-11	METAL CHIP	1K	5%	1/10W
	R8019	1-218-712-11	METAL CHIP	6.8K	0.50%	1/10W
	R8020	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
⚠	R8021	1-216-833-11	METAL CHIP	10K	5%	1/10W
	R8022	1-216-839-11	METAL CHIP	33K	5%	1/10W
	R8023	1-216-833-11	METAL CHIP	10K	5%	1/10W
	R8024	1-216-833-11	METAL CHIP	10K	5%	1/10W
	R8025	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
	R8026	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
	R8029	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
	R8030	1-215-903-11	METAL OXIDE	68K	5%	2W
	R8031	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
	R8032	1-216-821-11	METAL CHIP	1K	5%	1/10W
	R8033	1-216-833-11	METAL CHIP	10K	5%	1/10W
	R8034	1-216-833-11	METAL CHIP	10K	5%	1/10W
	R8035	1-218-692-11	METAL CHIP	1K	0.50%	1/10W
	R8036	1-214-800-11	METAL	2.2	1%	1/2W
	R8037	1-215-903-11	METAL OXIDE	68K	5%	2W
	R8038	1-216-809-11	METAL CHIP	100	5%	1/10W
	R8039	1-214-800-11	METAL	2.2	1%	1/2W
	R8040	1-215-913-11	METAL OXIDE	220	5%	3W
	R8041	1-218-710-11	METAL CHIP	5.6K	0.50%	1/10W
	R8042	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
	R8043	1-218-740-11	METAL CHIP	100K	0.50%	1/10W
	R8044	1-218-712-11	METAL CHIP	6.8K	0.50%	1/10W
	R8045	1-214-808-11	METAL	4.7	1%	1/2W
	R8046	1-214-808-11	METAL	4.7	1%	1/2W
	R8047	1-215-857-71	METAL OXIDE	10	5%	1W
	R8048	1-216-833-11	METAL CHIP	10K	5%	1/10W
	R8050	1-216-833-11	METAL CHIP	10K	5%	1/10W
	R8051	1-214-808-11	METAL	4.7	1%	1/2W
	R8053	1-214-808-11	METAL	4.7	1%	1/2W

	REF.NO.	PART NO.	DESCRIPTION	VALUES		
	R8055	1-218-748-11	METAL CHIP	220K	0.50%	1/10W
	R8056	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
	R8057	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
	R8058	1-216-809-11	METAL CHIP	100	5%	1/10W
	R8059	1-214-808-11	METAL	4.7	1%	1/2W
	R8060	1-214-808-11	METAL	4.7	1%	1/2W
	R8061	1-216-392-11	METAL OXIDE	1.8	5%	3W
	R8062	1-260-107-11	CARBON	4.7K	5%	1/2W
	R8063	1-214-808-11	METAL	4.7	1%	1/2W
	R8064	1-214-808-11	METAL	4.7	1%	1/2W
	R8065	1-260-328-11	CARBON	1K	5%	1/2W
	R8066	1-214-808-11	METAL	4.7	1%	1/2W
	R8067	1-214-808-11	METAL	4.7	1%	1/2W
	R8068	1-216-809-11	METAL CHIP	100	5%	1/10W
	R8069	1-214-808-11	METAL	4.7	1%	1/2W
	R8070	1-214-808-11	METAL	4.7	1%	1/2W
	R8071	1-215-381-00	METAL	22	1%	1/4W
	R8073	1-214-808-11	METAL	4.7	1%	1/2W
	R8075	1-214-808-11	METAL	4.7	1%	1/2W
	R8076	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
	R8077	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
	R8078	1-214-808-11	METAL	4.7	1%	1/2W
	R8079	1-214-808-11	METAL	4.7	1%	1/2W
	R8080	1-216-353-00	METAL OXIDE	2.2	5%	1W
	R8081	1-214-808-11	METAL	4.7	1%	1/2W
	R8082	1-214-808-11	METAL	4.7	1%	1/2W
	R8083	1-216-821-11	METAL CHIP	1K	5%	1/10W
	R8084	1-216-833-11	METAL CHIP	10K	5%	1/10W
	R8085	1-214-808-11	METAL	4.7	1%	1/2W
	R8086	1-214-808-11	METAL	4.7	1%	1/2W
⚠	R8087	1-249-385-11	CARBON	2.2	5%	1/4W
⚠	R8088	1-249-385-11	CARBON	2.2	5%	1/4W
	R8089	1-214-808-11	METAL	4.7	1%	1/2W
	R8090	1-214-808-11	METAL	4.7	1%	1/2W
	R8091	1-214-808-11	METAL	4.7	1%	1/2W
	R8092	1-214-808-11	METAL	4.7	1%	1/2W
	R8093	1-214-808-11	METAL	4.7	1%	1/2W
	R8094	1-214-808-11	METAL	4.7	1%	1/2W
	R8095	1-216-801-11	METAL CHIP	22	5%	1/10W
	R8096	1-216-801-11	METAL CHIP	22	5%	1/10W
	R8097	1-214-808-11	METAL	4.7	1%	1/2W
	R8098	1-214-808-11	METAL	4.7	1%	1/2W

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

REF.NO.	PART NO.	DESCRIPTION	VALUES		
R8100	1-216-475-11	METAL OXIDE	120	5%	3W
R8101	1-216-475-11	METAL OXIDE	120	5%	3W
R8102	1-218-734-11	METAL CHIP	56K	0.50%	1/10W
R8103	1-216-816-11	METAL CHIP	390	5%	1/10W
R8104	1-216-828-11	METAL CHIP	3.9K	5%	1/10W
R8105	1-214-808-11	METAL	4.7	1%	1/2W
R8106	1-214-808-11	METAL	4.7	1%	1/2W
R8109	1-216-813-11	METAL CHIP	220	5%	1/10W
R8110	1-249-424-11	CARBON	3.9K	5%	1/4W
R8111	1-216-819-11	METAL CHIP	680	5%	1/10W
R8112	1-216-824-11	METAL CHIP	1.8K	5%	1/10W
R8113	1-216-475-11	METAL OXIDE	120	5%	3W
R8114	1-216-475-11	METAL OXIDE	120	5%	3W
R8115	1-216-475-11	METAL OXIDE	120	5%	3W
R8116	1-216-475-11	METAL OXIDE	120	5%	3W
R8117	1-216-833-11	METAL CHIP	10K	5%	1/10W
R8118	1-216-833-11	METAL CHIP	10K	5%	1/10W
R8119	1-216-833-11	METAL CHIP	10K	5%	1/10W
R8120	1-216-833-11	METAL CHIP	10K	5%	1/10W
R8121	1-216-809-11	METAL CHIP	100	5%	1/10W
R8123	1-216-821-11	METAL CHIP	1K	5%	1/10W
R8124	1-249-377-11	CARBON	0.47	5%	1/4W
R8125	1-216-816-11	METAL CHIP	390	5%	1/10W
R8126	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R8127	1-216-341-11	METAL OXIDE	0.22	5%	1W
R8128	1-216-845-11	METAL CHIP	100K	5%	1/10W
R8129	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R8130	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R8131	1-216-833-11	METAL CHIP	10K	5%	1/10W
R8132	1-216-833-11	METAL CHIP	10K	5%	1/10W
R8133	1-215-923-00	METAL OXIDE	10K	5%	3W
R8134	1-215-873-00	METAL OXIDE	4.7K	5%	1W
R8135	1-215-923-00	METAL OXIDE	10K	5%	3W
R8136	1-216-833-11	METAL CHIP	10K	5%	1/10W
R8137	1-218-740-11	METAL CHIP	100K	0.50%	1/10W
R8138	1-216-833-11	METAL CHIP	10K	5%	1/10W
R8139	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R8140	1-216-833-11	METAL CHIP	10K	5%	1/10W
R8141	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R8142	1-216-833-11	METAL CHIP	10K	5%	1/10W
R8143	1-218-734-11	METAL CHIP	56K	0.50%	1/10W
R8144	1-216-809-11	METAL CHIP	100	5%	1/10W
R8145	1-218-716-11	METAL CHIP	10K	0.50%	1/10W
R8146	1-218-716-11	METAL CHIP	10K	0.50%	1/10W
R8147	1-218-710-11	METAL CHIP	5.6K	0.50%	1/10W
R8148	1-218-740-11	METAL CHIP	100K	0.50%	1/10W
R8149	1-249-401-11	CARBON	47	5%	1/4W
R8150	1-218-740-11	METAL CHIP	100K	0.50%	1/10W
R8151	1-218-692-11	METAL CHIP	1K	0.50%	1/10W
R8152	1-218-716-11	METAL CHIP	10K	0.50%	1/10W
R8153	1-218-692-11	METAL CHIP	1K	0.50%	1/10W
R8154	1-218-728-11	METAL CHIP	33K	0.50%	1/10W
R8155	1-215-469-00	METAL	100K	1%	1/4W
R8156	1-215-469-00	METAL	100K	1%	1/4W
R8157	1-218-738-11	METAL CHIP	82K	0.50%	1/10W
R8159	1-216-833-11	METAL CHIP	10K	5%	1/10W
R8161	1-216-845-11	METAL CHIP	100K	5%	1/10W
R8162	1-249-377-11	CARBON	0.47	5%	1/4W
R8163	1-216-845-11	METAL CHIP	100K	5%	1/10W
R8164	1-218-734-11	METAL CHIP	56K	0.50%	1/10W
R8165	1-249-425-11	CARBON	4.7K	5%	1/4W
R8166	1-218-716-11	METAL CHIP	10K	0.50%	1/10W
R8168	1-216-809-11	METAL CHIP	100	5%	1/10W
R8169	1-216-845-11	METAL CHIP	100K	5%	1/10W
R8170	1-218-712-11	METAL CHIP	6.8K	0.50%	1/10W
R8171	1-216-809-11	METAL CHIP	100	5%	1/10W
⚠ R8172	1-249-405-11	CARBON	100	5%	1/4W
R8173	1-216-845-11	METAL CHIP	100K	5%	1/10W
R8174	1-249-425-11	CARBON	4.7K	5%	1/4W
R8176	1-218-740-11	METAL CHIP	100K	0.50%	1/10W
R8178	1-216-841-11	METAL CHIP	47K	5%	1/10W
R8180	1-216-845-11	METAL CHIP	100K	5%	1/10W
R8181	1-216-845-11	METAL CHIP	100K	5%	1/10W
R8182	1-218-740-11	METAL CHIP	100K	0.50%	1/10W
R8183	1-218-740-11	METAL CHIP	100K	0.50%	1/10W
R8189	1-249-377-11	CARBON	0.47	5%	1/4W
R8190	1-215-429-00	METAL	2.2K	1%	1/4W
R8191	1-215-415-00	METAL	560	1%	1/4W
R8192	1-215-445-00	METAL	10K	1%	1/4W
R8193	1-215-445-00	METAL	10K	1%	1/4W
R8194	1-215-445-00	METAL	10K	1%	1/4W
R8195	1-215-445-00	METAL	10K	1%	1/4W
R8196	1-249-425-11	CARBON	4.7K	5%	1/4W
R8198	1-215-445-00	METAL	10K	1%	1/4W
R8201	1-249-397-11	CARBON	22	5%	1/4W

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

A component identified by this ⧓ symbol indicates that it has been carefully factory-selected to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

	REF.NO.	PART NO.	DESCRIPTION	VALUES		
	R8202	1-260-092-11	CARBON	270	5%	1/2W
⚠	R8205	1-249-377-11	CARBON	0.47	5%	1/4W
	R8206	1-249-377-11	CARBON	0.47	5%	1/4W
	R8208	1-260-288-11	CARBON	0.47	5%	1/2W
	R8209	1-216-833-11	METAL CHIP	10K	5%	1/10W
	R8210	1-216-809-11	METAL CHIP	100	5%	1/10W
	R8211	1-215-906-11	METAL OXIDE	15	5%	3W
	R8212	1-215-907-11	METAL OXIDE	22	5%	3W
	R8213	1-216-821-11	METAL CHIP	1K	5%	1/10W
	R8216	1-216-833-11	METAL CHIP	10K	5%	1/10W
	R8217	1-216-821-11	METAL CHIP	1K	5%	1/10W
	R8218	1-260-123-11	CARBON	100K	5%	1/2W
⚠	R8219	1-249-377-11	CARBON	0.47	5%	1/4W
	R8220	1-216-821-11	METAL CHIP	1K	5%	1/10W
	R8222	1-216-341-11	METAL OXIDE	0.22	5%	1W
	R8223	1-218-752-11	METAL CHIP	330K	0.50%	1/10W
	R8224	1-260-127-11	CARBON	220K	5%	1/2W
⚠	R8225	1-260-292-11	CARBON	1	5%	1/2W
⚠	R8228	1-260-314-11	CARBON	68	5%	1/2W
	R8230	1-218-751-11	METAL CHIP	300K	0.50%	1/10W
	R8232	1-216-809-11	METAL CHIP	100	5%	1/10W
	R8233	1-216-809-11	METAL CHIP	100	5%	1/10W
	R8234	1-216-809-11	METAL CHIP	100	5%	1/10W
	R8235	1-216-809-11	METAL CHIP	100	5%	1/10W
	R8236	1-218-917-11	METAL CHIP	820K	0.50%	1/10W
	R8237	1-216-857-11	METAL CHIP	1M	5%	1/10W
	R8242	1-216-864-11	SHORT CHIP			
	R8243	1-216-809-11	METAL CHIP	100	5%	1/10W
	R8249	1-215-923-00	METAL OXIDE	10K	5%	3W
	R8250	1-215-923-00	METAL OXIDE	10K	5%	3W
	R8251	1-216-821-11	METAL CHIP	1K	5%	1/10W
	R8253	1-216-816-11	METAL CHIP	390	5%	1/10W
	R8254	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
	R8255	1-215-873-00	METAL OXIDE	4.7K	5%	1W
	R8256	1-249-401-11	CARBON	47	5%	1/4W
	R8258	1-216-833-11	METAL CHIP	10K	5%	1/10W
	R8259	1-216-809-11	METAL CHIP	100	5%	1/10W
	R8260	1-216-845-11	METAL CHIP	100K	5%	1/10W
	R8261	1-216-845-11	METAL CHIP	100K	5%	1/10W
	R8262	1-216-845-11	METAL CHIP	100K	5%	1/10W
	R8263	1-216-845-11	METAL CHIP	100K	5%	1/10W

	REF.NO.	PART NO.	DESCRIPTION	VALUES
		TRANSFORMER		
	T8001	1-437-708-11	TRANSFORMER, FERRITE (DFT)	
	T8002	1-437-739-11	TRANSFORMER, FERRITE (HDT)	
	T8003	1-437-401-11	TRANSFORMER, FERRITE (HOT)	
⚠	T8004	1-437-399-21	TRANSFORMER, FERRITE (LOT)	
⚠	T8005	1-453-285-51	FBT ASSY NX-4006//X4P4	
	T8006	1-437-739-11	TRANSFORMER, FERRITE (HDT)	
		THERMISTOR		
	TH8001	1-800-193-00	THERMISTOR	
		VARIABLE RESISTOR		
⧓⚠	VR8001	1-225-627-91	RES, VAR, ADJ, CERMET 2K	
⧓⚠	VR8002	1-225-630-91	RES, VAR, ADJ, CERMET 20K	

SR

The SR board is not field repairable. If service is required, use the following part number to order a complete replacement board. Data is provided for reference only.

	REF. NO.	PART NO.	DESCRIPTION	VALUES
	*	**A-1400-759-A**	**SR BOARD, MOUNTED**	
		CONNECTOR		
*	CN9901	1-564-506-11	PLUG,CONNECTOR	3P
		DIODE		
	D9902	8-719-069-55	DIODE UDZSTE-175.6B	
		BATTERY		
	SB9901	1-756-295-11	BATTERY, SOLAR	

ACCESSORIES AND PACKING

	REF. NO.	PART NO.	DESCRIPTION	VALUES
		1-796-426-11	CD-ROM	
*		4-042-463-01	SHEET, PROTECTION	
*		4-076-420-01	BAG, PROTECTION	
		4-088-026-11	MANUAL, INSTRUCTION	
		4-088-026-21	MANUAL, INSTRUCTION (KP-57WV700/65WV700 ONLY)	
		4-088-026-31	MANUAL, INSTRUCTION (KP-65WV700 ONLY)	
*		4-088-440-01	CUSHION, UPPER (KP-57WV600/57WV700 ONLY)	
*		4-088-441-01	CUSHION, LOWER (KP-57WV700 ONLY)	
*		4-088-444-01	CUSHION, LOWER (KP-57WV600 ONLY)	
*		4-088-445-01	CUSHION, UPPER (KP-65WV600/65WV700 ONLY)	
*		4-088-446-01	CUSHION, LOWER (KP-65WV600/65WV700 ONLY)	
*	☛	4-088-442-02	INDIVIDUAL, CARTON (KP-57WV600/57WV700 ONLY)	
*	☛	4-088-447-02	INDIVIDUAL, CARTON (KP-65WV600/65WV700 ONLY)	
*		4-088-443-01	TRAY (KP-57WV600/57WV700 ONLY)	
*		4-088-448-01	TRAY (KP-65WV600/65WV700 ONLY)	
		1-468-681-11	REMOTE COMMANDER RM-Y188	
		4-081-888-01	BATTERY COVER (for RM-Y188)	

Sony Corporation
Sony Technology Center
Technical Services
Service Promotion Department

9-965-926-81

English
2002KJ74WEB-1
Printed in USA
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SERVICE MANUAL DA-4X CHASSIS

MODEL NAME	REMOTE COMMANDER	DESTINATION	CHASSIS NO.
KP-57WV600	*RM-Y188*	*US/CND*	*SCC-P92D-A*
KP-57WV700	*RM-Y188*	*US/CND*	*SCC-P92B-A*
KP-65WV600	*RM-Y188*	*US/CND*	*SCC-P92C-A*
KP-65WV700	*RM-Y188*	*US/CND*	*SCC-P92A-A*

CORRECTION - 3

SUBJECT: CONVERGENCE ADJUSTMENT PROCEDURE

Correct the service manual as shown.
File this Correction with the service manual.

☛ : Corrected Item

Section 2: Set Up Adjustments
2-12 Registration Adjustment (PJE Mode Only) (Page 48)
2-13-2 Copying All Registration Data to Other Modes (Page 52)

COLOR REAR VIDEO PROJECTOR

SONY®

Sony Corporation
Sony Technology Center
Technical Services
Service Promotion Department

9-965-926-93

English
2003AJ74WEB-1
Printed in USA

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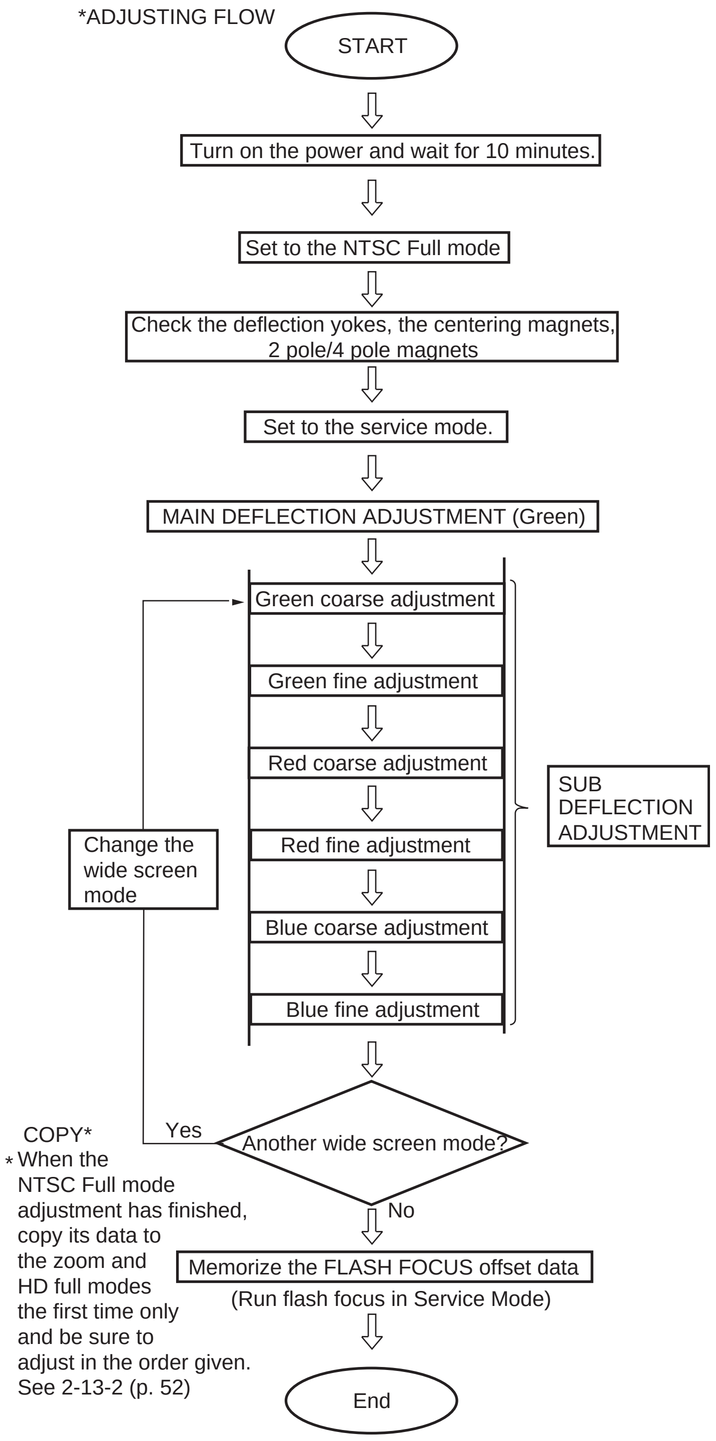
2-12. REGISTRATION ADJUSTMENT (PJE MODE ONLY)

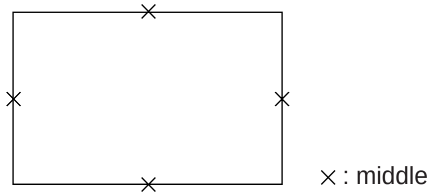

*ADJUSTING FLOW
START
Turn on the power and wait for 10 minutes.
Set to the NTSC Full mode
Check the deflection yokes, the centering magnets, 2 pole/4 pole magnets
Set to the service mode.
MAIN DEFLECTION ADJUSTMENT (Green)
Green coarse adjustment
Green fine adjustment
Red coarse adjustment
Red fine adjustment
Blue coarse adjustment
Blue fine adjustment
SUB DEFLECTION ADJUSTMENT
Change the wide screen mode
Yes
Another wide screen mode?
No
Memorize the FLASH FOCUS offset data
(Run flash focus in Service Mode)
End
COPY*

* When the NTSC Full mode adjustment has finished, copy its data to the zoom and HD full modes the first time only and be sure to adjust in the order given. See 2-13-2 (p. 52)

2-12-1. SETUP FOR ADJUSTMENT

MARKING

- At the 4 sides of the screen, locate the middle. Use a tape measure to identify the middle.



DATA SETTING

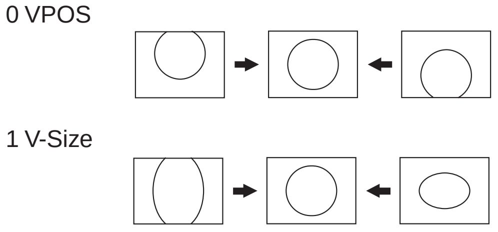
1. Set NTSC Full mode.
2. Enter the service mode, and select “PJE”.

NOTE: When you replace printed circuit boards or devices or CRTs, and when correction is drastically necessary, press the “7” + ENTER on the remote commander to initialize the data in the Projector Engine mode. Press the MUTING + ENTER on the remote commander to write the data.

2-12-2. MAIN DEFLECTION ADJUSTMENT

NOTE: Before this adjustment, refer to section 2-11 for PJE item #78-85 input data.

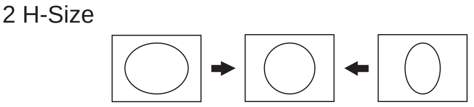
1. Cover the red and blue CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
2. Enter the monoscope signal and set to NTSC Full mode.
3. Enter the service mode, and select “2170D-1”.
4. Adjust “0 VPOS” and “1 VSIZ” so that the picture is displayed in the center of the screen.
5. Adjust “2VSZ0” for 1080i vertical size adjustment.


0 VPOS
1 V-Size

6. Select “2170D-2” and adjust “2 H-Size” so that the picture size is within the specification.

SPEC Overscan Spec. = 9%

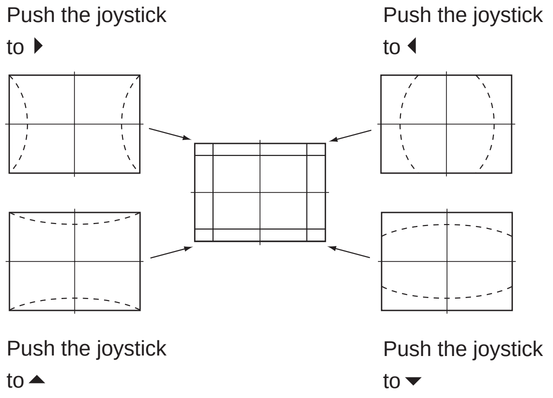
Input Signal	H SIZE	V SIZE
Monoscope	15.6 ± 0.2 sq.	11.5 ± 0.2 sq.



7. Copy the data of the NTSC Full mode to the other wide screen mode and, if necessary, adjust in the other mode.

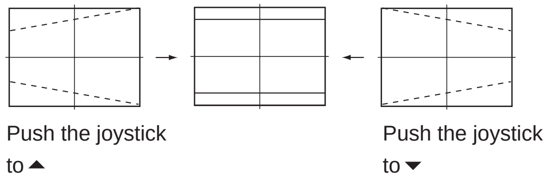
12. Select “GRN PIN”, and adjust so that right and left vertical lines on the screen become straight. Adjust so that upper and lower horizontal lines on the screen become straight.

GRN PIN (Horizontally/Vertically)



13. Select “GRN KEY”, and adjust so that upper and lower horizontal lines on the screen become parallel.

GRN KEY (Vertically)



Note: The VPIN and KEY adjustments affect each other.
If necessary, adjust these mutually.

14. Press the “9” button on the remote commander to enter fine adjustment mode.
15. Make the fine adjustment so that horizontal lines and vertical lines become straight.
16. Press the “9” button on the remote commander to return to coarse adjustment mode.

2) RED ADJUSTMENT

1. Cover the blue CRT lens with a lens caps to allow only the green and red to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
2. Press the “3” button on the remote commander to select RED mode.
3. Adjust the following items so that red lines overlap with green lines.
   - RED CENT (horizontally/vertically)
   - RED SKEW (horizontally/vertically)
   - RED SIZE (horizontally/vertically)
   - RED LIN (horizontally/vertically)
   - RED MSIZ (horizontally)
   - RED MLIN (horizontally)
   - RED PIN (horizontally/vertically)
   - RED KEY (vertically)
4. Press the “9” button on the remote commander to enter fine adjustment mode.
5. Make the fine adjustment so that horizontal lines and vertical lines overlap with green lines.
6. Press the “9” button on the remote commander to return to coarse adjustment mode.

Note: If lens caps are unavailable, you can cut off the unnecessary color beams by controlling the service mode 2170P-2 1 RGBS.

3) BLUE ADJUSTMENT

1. Remove the lens cap from the blue picture lens to display all colors.
2. Press the “3” button on the remote commander to select BLU mode.
3. Adjust the following items so that blue lines overlap with green lines.
   - BLU CENT (horizontally/vertically)
   - BLU SKEW (horizontally/vertically)
   - BLU SIZE (horizontally/vertically)
   - BLU LIN (horizontally/vertically)
   - BLU PIN (horizontally/vertically)
   - BLU KEY (vertically)
4. Press the “9” button on the remote commander to enter fine adjustment mode.
5. Make the fine adjustment so that horizontal lines and vertical lines overlap with green and red lines.
6. Press the “9” button on the remote commander to return `to coarse adjustment mode.

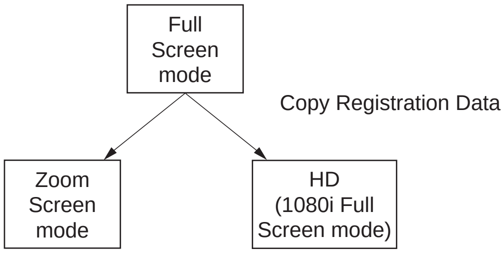
Note: When replacing CRTs, adjust the set-up adjustments (2-1 to 2-9) and the registration adjustment (2-12). When replacing multiple CRTs at the same time, replace and adjust them individually.

4) REGISTRATION DATA WRITING

1. After completing each adjustment of green, blue, and red for the NTSC Full mode press the “MUTING”+ “ENTER” buttons on the remote commander to write the registration data to the NVM.

2-13-2.COPYING ALL REGISTRATION DATA TO OTHER MODES

1. Make sure that the adjustment for NTSC Full mode are complete and the data have already been written.
2. Select the PJE mode.
3. Select COPY and set the data to “01”, and press the “MUTING”+“ENTER” buttons on the remote commander.
4. The data from the NTSC Full mode is copied to zoom and HD full modes.



5. Check in the other modes and adjust as demands.
   Be sure to write data in each mode.
   Adjustment for wide zoom mode should be done separately.

SERVICE MANUAL DA-4X CHASSIS

MODEL NAME	REMOTE COMMANDER	DESTINATION	CHASSIS NO.
KP-57WV600	RM-Y188	US/CND	SCC-P92D-A
KP-57WV700	RM-Y188	US/CND	SCC-P92B-A
KP-65WV600	RM-Y188	US/CND	SCC-P92C-A
KP-65WV700	RM-Y188	US/CND	SCC-P92A-A

CORRECTION- 4

SUBJECT: EXPLODED VIEW CHASSIS PART NUMBER

Correct the service manual as shown.
File this Correction with the service manual.

☛ : Corrected Item

Section 6: Exploded View
6-3. CHASSIS (Page 109)

INCORRECT

REF. NO.	PART NO.	DESCRIPTION
77	3-184-556-01	CASTER

CORRECT

	REF. NO.	PART NO.	DESCRIPTION
☛	77	4-061-174-01	CASTER

COLOR REAR VIDEO PROJECTOR

SONY®

Sony Corporation
Sony Technology Center
Technical Services
Service Promotion Department

English
2003AJ74WEB-1
Printed in USA

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9-965-926-94

SERVICE MANUAL DA-4X CHASSIS

MODEL NAME	REMOTE COMMANDER	DESTINATION	CHASSIS NO.
KP-57WV600	*RM-Y188*	*US/CND*	*SCC-P92D-A*
KP-57WV700	*RM-Y188*	*US/CND*	*SCC-P92B-A*
KP-65WV600	*RM-Y188*	*US/CND*	*SCC-P92C-A*
KP-65WV700	*RM-Y188*	*US/CND*	*SCC-P92A-A*

CORRECTION- 5

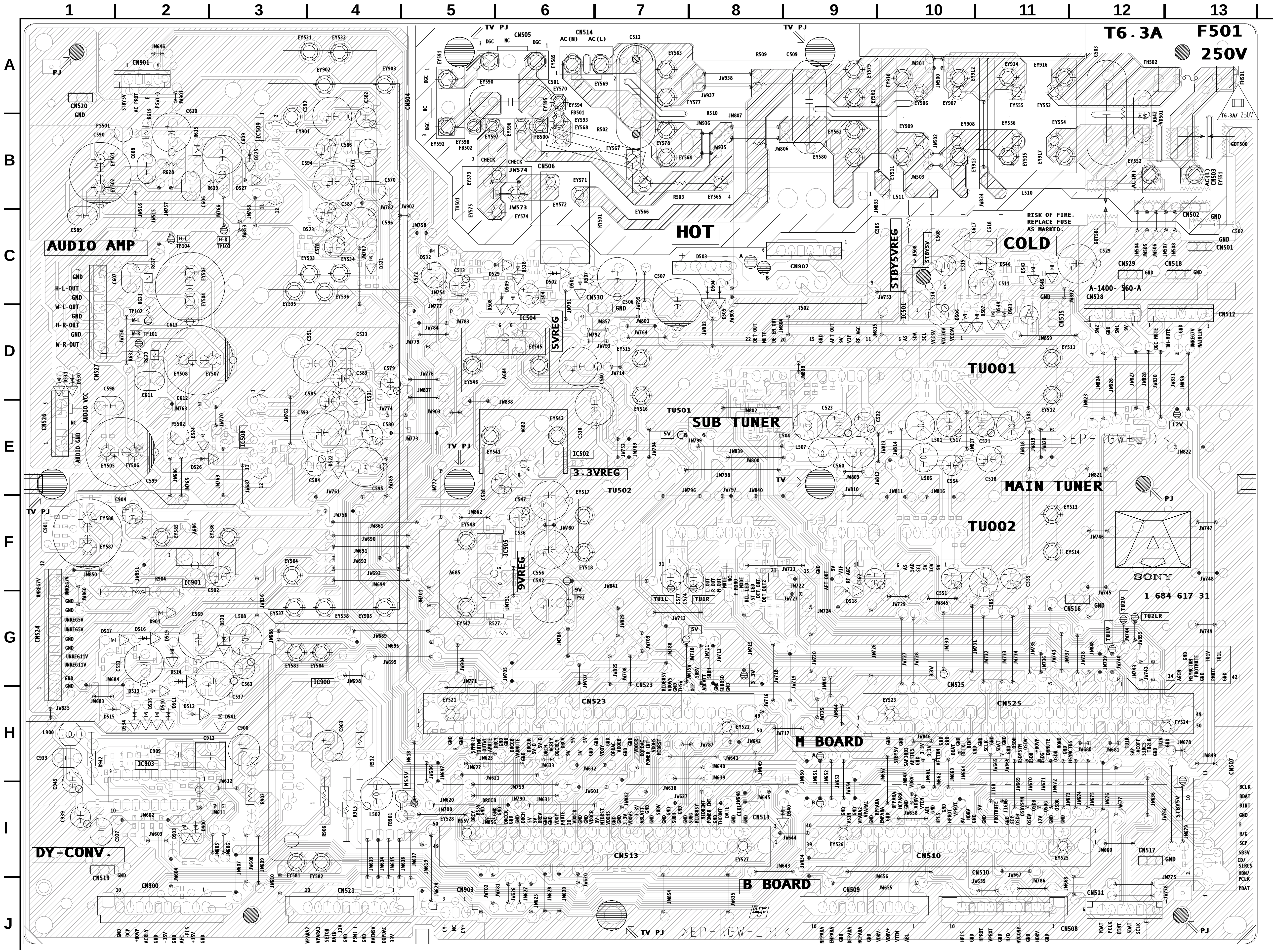
SUBJECT: CORRECTED A PWB

Correct the service manual as shown.
File this Correction with the service manual.

☞ : Corrected Item

Section 5: Diagrams
5-4. Schematics and Supporting Information (Page 75 & 76)

A [AC/DC POWER, AUDIO POWER, TUNER] [COMPONENT SIDE]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C
D
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F
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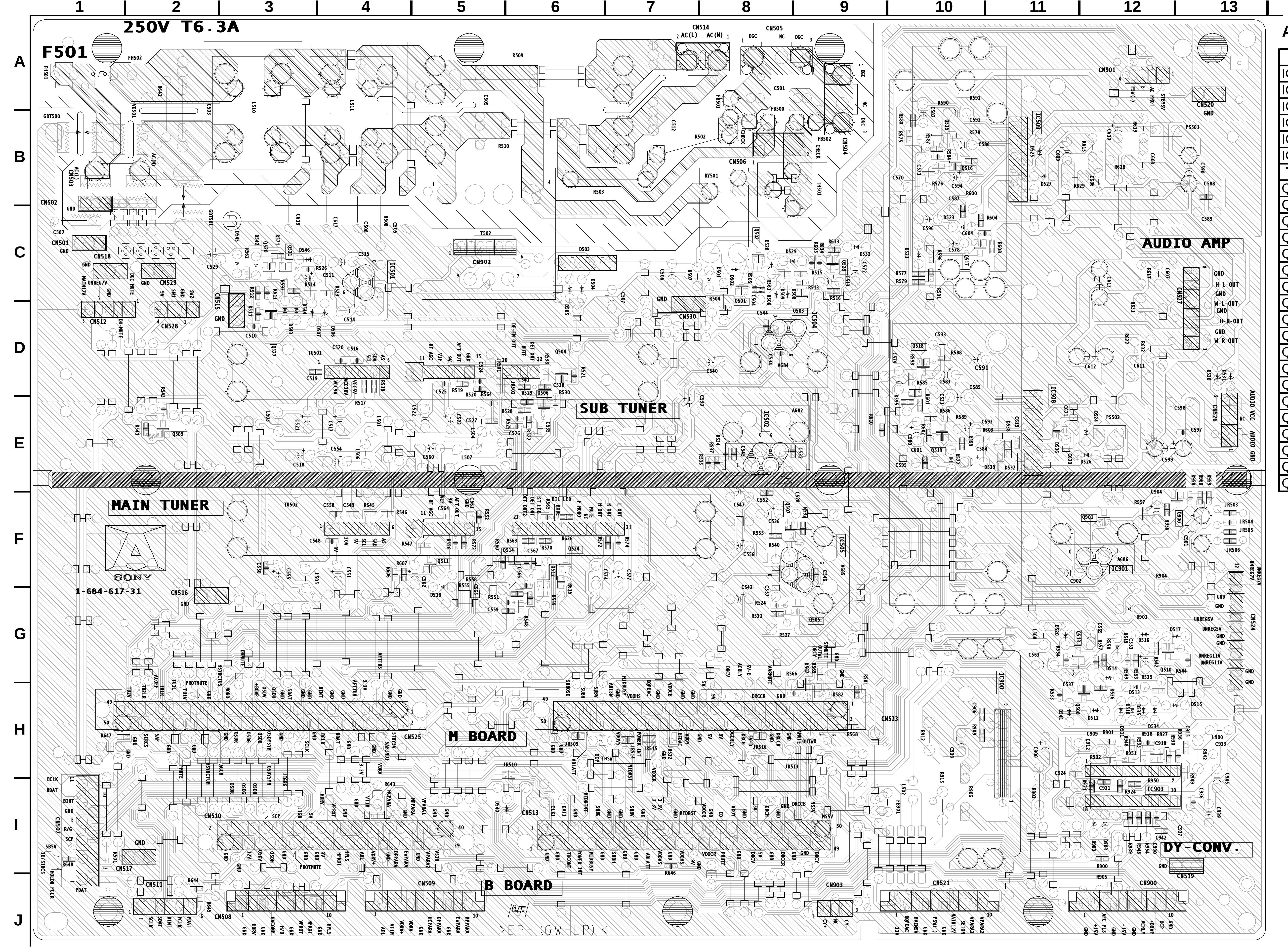
H
I
J
T6.3A
F501
250V
AUDIO AMP
HOT
COLD
RISK OF FIRE.
REPLACE FUSE
AS MARKED
STBY5VREG
5VREG
3.3VREG
9VREG
TU001
SUB TUNER
TU501
TU502
MAIN TUNER
TU002
SONY
1-684-617-31
A-1400-560-A
>EP-(GW+LP)<
M BOARD
B BOARD
DY-CONV.
CN523
CN525
CN513
CN510
TV PJ
PJ

A [AC/DC POWER, AUDIO POWER, TUNER] [CONDUCTOR SIDE]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250V T6.3A
F501
AUDIO AMP
SUB TUNER
MAIN TUNER
M BOARD
B BOARD
DY-CONV.
SONY
1-684-617-31
IC501
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T502
TU501
TU502
>EP-(GW+LP)<

A BOARD LOCATOR LIST

IC		DIODE	
IC501	C-4	D503	C-6
IC502	D-8	D504	C-6
IC504	C-8	D505	C-6
IC505	E-8	D508	C-8
IC508	D-10	D509	C-8
IC901	F-11	D510	G-11
TRANSISTOR		D511	G-11
Q503	C-8	D515	G-11
Q504	D-6	D516	F-11
Q505	F-8	D517	F-11
Q506	D-5	D519	F-11
Q507	E-8	D520	F-10
Q509	E-2	D521	C-9
Q510	G-11	D522	E-9
Q511	F-4	D524	D-11
Q512	F-6	D526	E-11
Q513	F-10	D528	C-7
Q514	F-5	D529	C-7
Q517	C-9	D530	D-12
Q518	D-9	D531	D-12
Q519	E-9	D534	G-11
Q520	C-3	D535	G-11
Q521	C-3	D540	H-5
Q524	F-6	D541	G-10
Q527	C-3	D542	C-3
Q528	C-8	D543	C-3
		D544	C-3
		D545	C-3
		D546	C-3
		D901	F-11

Sony Corporation
Sony Technology Center
Technical Services
Service Promotion Department

English
2003IJ74WEB-1
Printed in USA

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